

Purchasing Week

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\$6 A YEAR U.S. AND CANADA \$25 A YEAR FOREIGN

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Former ICC Commissioner Hits 'Outmoded' Cargo Rates

New York—Strong protests against "outmoded" rate-making methods coupled with a "revolutionary" solution to the problem were tossed like a bombshell at the transportation industry last week by a former Interstate Commerce Commissioner.

The broadside fell in the midst of leading shippers and carriers gathered here at the three-day Cargo Handling Exposition—a display of the latest gadgets, devices, and equipment for cargo handling and shipping.

Anthony F. Arpaia, now vice president of international services for Railway Express, demanded that rate-making keep in step with equipment progress.

In a nutshell, Arpaia's proposal called for:

- Classifying packaged freight through cubic measurements.



FORK LIFT TRUCK demonstrates strength at Cargo Handling Show.

- Rate-making on a cube-mile concept with specific accessorial charges "where necessary and appropriate."

"The sheer simplicity of this type of rate-making might, in one stroke, clear up one of the great handicaps and expense items of public transportation," he said.

However, he traced two steps that would be required in advance of such a plan. As an important part of the proposal he asked for:

- Greater inter-carrier coordination and integration.
- Containerization, to make for easier integration and interchange, as well as rate making on a "space" basis.

"There is strong indication," (Turn to page 38, column 1)

Government Steps Into GE Contract Dispute With IUE

New York—The government stepped in at the 11th hour in General Electric's contract talks with the International Union of Electrical Workers.

Federal Mediator Joseph F. Finnegan asked the union, which had threatened to strike at midnight last Saturday, to keep workers on the job while negotiations continued.

An earlier effort by Gov. Foster Furcolo of Massachusetts to gain a 15-day postponement in the threatened walkout went by the boards when the company refused to accept a fact-finding committee.

Other attempts to reach an agreement between union and company continued.

The IUE, which represents 70,000 of GE's more than 240,000 employees in 40 plants, had demanded a two-year contract containing an annual 3½% (Turn to page 38, column 5)

GM Probes Employees' Outside Business Deals

Detroit — General Motors Corp. is putting the microscope to the outside interests of top executives and employees connected with its purchasing operation.

A probe, via questionnaire, is being conducted by the company's executive committee to uncover possible conflict of interests involving outside suppliers, such as came to light at Chrysler.

Officers, general managers, (Turn to page 38, column 2)

WHAT RAILROAD MERGERS MEAN TO YOU

Immediate Benefits:

- Faster deliveries through elimination of duplicate lines and terminal facilities.
- Lower costs with removal of switching charges and "two-road" rates in effect prior to merger.
- Less paperwork because freight can be shipped via merged lines through one agent and on one bill of lading.

Long-Range Gains:

- Possibility of lower rates as economies resulting from merger are passed on to shippers.
- Improved service with less damage as merged lines modernize plant and equipment, revamp scheduling.
- Faster freight movement as rails improve traffic control through yard automation and EDP to expedite customer shipments.

Rail Mergers Put P.A.'s on the Road To Greater Savings, Better Service

Unveiling of New Model Cars Shows Detroit Slamming Brakes on Prices

Detroit—Autos are joining the imposing list of industries holding the price line or making some cuts in an effort to keep the business wheels rolling.

Those bearing slightly lower tags for 1961 include Valiant, Dodge Polara, Ford Galaxie and one Cadillac model.

But for most other lines, 1961 listings will be comparable to quotes on 1960 models. And that goes for the expensive as well as the medium and compact car fields.

Weakness in steel and other material tags is one of the reasons why manufacturers have been able to keep a lid on prices. It's kept profit margins at respectable levels despite rising labor and other costs.

But competition also is playing a key role.

As one Detroit spokesman put it, "With all the new models and only a 6.5-million year expected for 1961—automakers are leaving no stone unturned to insure their share of the market."

Car by car, here's how auto prices now shape up:

Valiant: Chrysler is cutting prices of its compact Valiant from \$19 to \$36 to compete with General Motors and Ford in the small car field.

In addition, introduction of a (Turn to page 4, column 4)

Initial Payoff Will Be Speedier Shipments, More Efficient Handling

New York—Shippers stand to reap huge and varied benefits as railroads drive down the merger route under a full throttle. Their goal: Streamline operations and thus beat back the onslaughts of "subsidized" competition.

For shippers—it could add up to the biggest dollar package in history. The chart above spells out some of these savings.

The latest merger drive, industry observers predict, will change the nation's rail map, sparking these developments:

- Faster movement of freight at lower rates, because of rescheduling and elimination of duplicating lines.

- Increased sales effort by the rails to win back business lost over the last 20 years—some 33½% of their total freight.

- Development of new trans- (Turn to page 37, column 1)

Gas Firms Try Additives To Juice Up Slow Sales

New York—Major gasoline refiners appear to be under the influence of additives.

Faced with slumping sales, over-production, and price weakness now that the summer driving season is over, these producers appear set to initiate new marketing pitches in an effort to grab off business from each other.

Winter weather road signs point to additives as a focal point of these new marketing pitches.

Technical developments in the (Turn to page 37, column 1)

This Week's

Purchasing Perspective

OCT. 3-9

CAUTIOUS CONSUMERS—Just like businessmen, the work-a-day consumer has injected a measure of caution into his buying plans. Latest findings indicate that both should be good but not spectacular for the rest of the year.

These turns in business and consumer purchasing have sounded a double sour note for industrial ears in general. And they explain the reason behind much of the recession talk that has provided business forecasters and commentators with a continuing topic in recent weeks.

The Federal Reserve Board came up last week with the first of what will be a regular quarterly survey of consumer intentions to buy. Like the Michigan Consumer Survey reported the previous week (see PW, Sept. 26, '60, p. 3), the federal assessment indicated continued consumer hesitancy to splurge on durable goods. But on the whole, plans of U.S. families to buy (Turn to page 37, column 4)

P/W PANORAMA

• **School for Strategists** serves up its second course. On page 34, you'll find another P/W device to help you sharpen your business skills and enjoy yourself at the same time. It's called "Operations Research" and it's fun. Try it.

• **More on the 1961 Models.** Purchasing Week represents the third in its series of assessments of the new model cars and their potential for fleet buyers. This week: Buick Special, Oldsmobile F-85, Corvair, and Chevrolet. See page 24.

• **Steel Bids for a Comeback.** U. S. Steel has launched the biggest promotion drive ever put on by a basic producer. Pages 20 and 21 will give you an idea of how steel is trying to recapture lost markets and get a foothold on new ones.

• **Methods of Accepting an Order** and a buyer's right to refuse delivery are scrutinized from the legal viewpoint in this month's "The Law and You" column. For discussions of these and other fine points of Purchasing, turn to page 18.

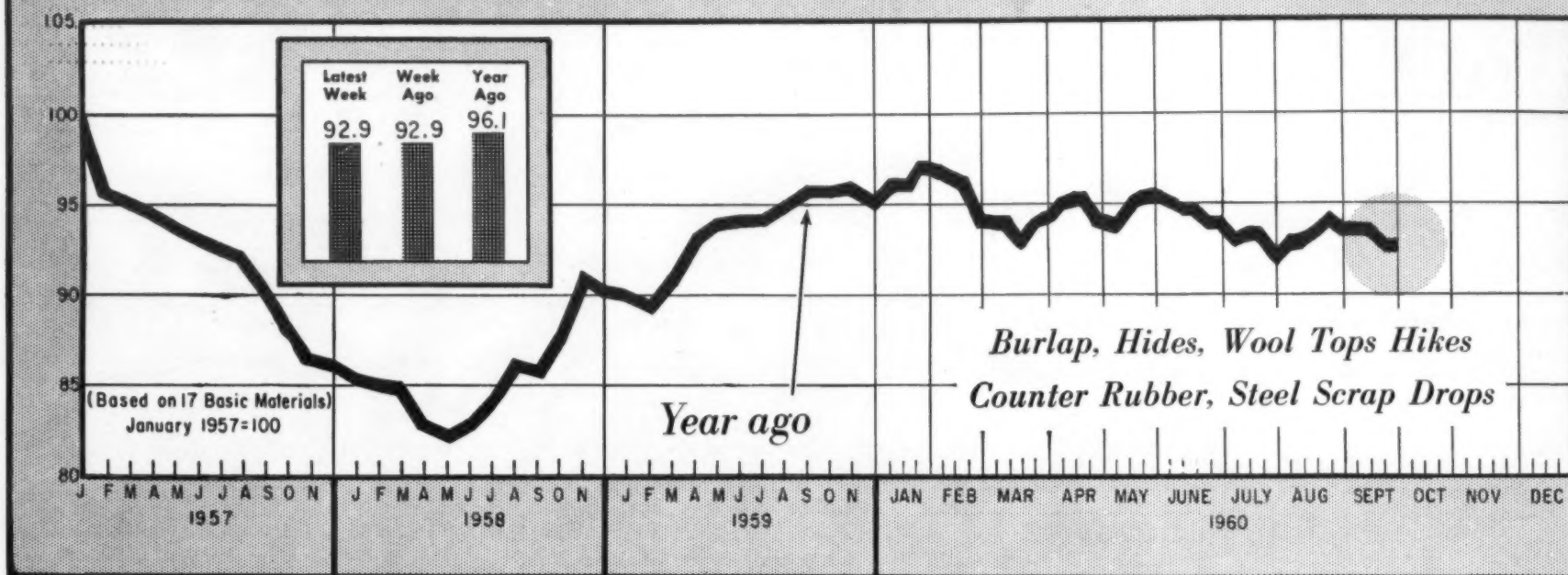
Plywood Futures

Tacoma, Wash.—A sample futures contract for plywood, drawn up by committees of the N. Y. Mercantile Exchange and the industry, was presented last week at a Plywood Manufacturers Institute meeting here.

Although in rough form, the sample is a big step toward a futures market in plywood (see PW, Aug. 22, '60, p. 3). Next step: providing for specific trading grades, delivery points, and other conditions.

Purchasing Week Industrial Materials Price Barometer

This index, based on 17 basic materials, was especially designed by the McGraw-Hill Department of Economics.



This Week's Commodity Prices

	Sept. 28	Sept. 21	Year Ago	% Yrly Change
METALS				
Pig iron, Bessemer Pitts., gross ton.....	67.00	67.00	67.00	0
Pig iron, basic valley, gross ton.....	66.00	66.00	66.00	0
Steel, billets, Pitts., net ton.....	80.00	80.00	80.00	0
Steel, structural shapes, Pitts., cwt.....	5.50	5.50	5.50	0
Steel, structural shapes, Los Angeles, cwt.....	6.20	6.20	6.20	0
Steel, bars, del., Phila., cwt.....	5.975	5.975	5.975	0
Steel, bars, Pitts., cwt.....	5.675	5.675	5.675	0
Steel, plates, Chicago, cwt.....	5.30	5.30	5.30	0
Steel scrap, #1 heavy, del. Pitts., gross ton.....	30.50	30.50	38.00	-19.7
Steel scrap, #1 heavy, del. Cleve., gross ton.....	32.50	32.50	38.50	-15.6
Steel scrap, #1 heavy, del. Chicago, gross ton.....	28.00	30.00	42.00	-33.3
Aluminum, pig, lb.....	.26	.26	.247	+ 5.3
Secondary aluminum, #380 lb.....	.234	.24	.238	- 1.7
Copper, electrolytic, wire bars, refinery, lb.....	.326	.326	.312	+ 4.5
Copper scrap, #2, smelters price, lb.....	.245	.248	.243	+ .8
Lead, common, N.Y., lb.....	.12	.12	.13	- 7.7
Nickel, electrolytic, producers, lb.....	.74	.74	.74	0
Tin, Straits, N.Y., lb.....	1.023	1.023	1.028	- .5
Zinc, Prime West, East St. Louis, lb.....	.13	.13	.12	+ 8.3
FUELS†				
Fuel oil #6 or Bunker C, Gulf, bbl.....	2.30	2.30	2.00	+15.0
Fuel oil #6 or Bunker C, N.Y., barge, bbl.....	2.62	2.62	2.37	+10.5
Heavy fuel, PS 400, Los Angeles, rack, bbl.....	2.05	1.95	2.15	- 4.7
Lp-Gas, Propane, Okla., tank cars, gal.....	.045	.045	.05	-10.0
Gasoline, 92 oct. reg., Chicago, tank car, gal.....	.126	.126	.119	+ 5.9
Gasoline, 84 oct. reg., Los Angeles, rack, gal.....	.108	.108	.112	- 3.6
Kerosene, Gulf, Cargoes, gal.....	.09	.09	.086	+ 4.7
Heating oil #2, Chicago, bulk, gal.....	.095	.095	.091	+ 4.4
CHEMICALS				
Ammonia, anhydros, refrigeration, tanks, ton.....	94.50	94.50	86.50	+ 9.2
Benzene, petroleum, tanks, Houston, gal.....	.34	.34	.31	+ 9.7
Caustic soda, 76% solid drums, carlots, cwt.....	4.80	4.80	4.80	0
Coconut oil, inedible, crude, tanks, N.Y. lb.....	.14	.14	.193	-27.5
Glycerine, synthetic, tanks, lb.....	.293	.293	.278	+ 5.3
Linseed oil, raw, in drums, carlots, lb.....	.161	.163	.17	- 5.3
Phthalic anhydride, tanks, lb.....	.185	.185	.165	+12.9
Polyethylene resin, high pressure molding, carlots, lb.....	.275	.275	.35	-21.4
Rosin, W.G. grade, carlots, fob N.Y. cwt.....	18.10	18.10	10.90	+66.1
Shellac, T.N., N.Y. lb.....	.31	.31	.31	0
Soda ash, 58%, light, carlots, cwt.....	1.55	1.55	1.55	0
Sulfur, crude, bulk, long ton.....	23.50	23.50	23.50	0
Sulfuric acid 66% commercial, tanks, ton.....	22.35	22.35	22.35	0
Tallow, inedible, fancy, tank cars, N.Y. lb.....	.056	.064	.065	-13.8
Titanium dioxide, anatase, reg. carlots, lb.....	.255	.255	.255	0
PAPER				
Book paper, A grade, Eng. finish, Untrimmed, carlots, cwt.....	17.75	17.75	17.20	+ 3.2
Bond paper, #1 sulfite, water marked 20 lb, car. lots, cwt.....	25.20	25.20	25.20	0
Chipboard, del. N.Y., carlots, ton.....	100.00	100.00	95.00	+ 5.3
Wrapping paper, std. Kraft, basis wt. 50 lb rolls.....	9.50	9.50	9.00	+ 5.6
Gummed sealing tape, #2, 60 lb basis, 600 ft. bundle.....	6.30	6.30	6.30	0
Old corrugated boxes, dealers, Chicago, ton.....	18.00	18.00	21.00	-14.3
BUILDING MATERIALS†				
Cement, Portland, bulk carlots, fob New Orleans, bbl.....	3.65	3.65	3.65	0
Cement, Portland, bulk carlots, fob N.Y., bbl.....	4.18	4.18	4.18	0
Southern pine, 2x4, s4s, trucklots, fob N.Y., mftbm.....	120.00	120.00	125.00	- 4.0
Douglas fir, 2x4, s4s, carlots, fob Chicago, mftbm.....	134.00	135.00	141.00	- 5.0
Spruce, 2x4, s4s, carlots, fob Toronto, mftbm.....	82.00	82.00	88.00	- 6.8
Fir plywood, 1/4" AD, 4x8, dealer, crld, fob mill, msf.....	68.00	68.00	68.00	0
TEXTILES				
Burlap, 10 oz. 40", N.Y., yd.....	.122	.12	.10	+22.0
Cotton middling, 1", N.Y., lb.....	.323	.324	.329	- 1.8
Printcloth, 39", 80x80, N.Y., spot, yd.....	.19	.19	.195	- 2.6
Rayon twill, 40 1/2", 92x62, N.Y., yd.....	.225	.225	.255	-11.8
Wool tops, N.Y., lb.....	1.455	1.44	1.58	- 7.9
HIDES AND RUBBER				
Hides, cow, light native, packers, Chicago, lb.....	.165	.16	.255	-35.3
Rubber, #1 std ribbed smoked sheets, N.Y., lb.....	.35	.358	.445	-21.3

† Source: Petroleum Week † Source: Engineering News-Record

This Week's

Price Perspective

OCTOBER 3-9

IS BUSINESS HEADED INTO A DEEPER SLUMP?

Economists who think it is point to such bearish signs as: (1) the low level of incoming orders, (2) the easiness in sensitive commodity prices, (3) consumer reluctance to spend, and (4) growing unemployment.

And to some extent these clues are significant. No one, for example, will deny their role in limiting the expected fall business pickup.

But there are two sides to the picture.

What these bearish forecasters tend to overlook is the host of positive economic forces that are now working in the opposite direction—in the direction of shoring up the economy.

As of now these are strong enough to nip any recession in the bud.

DEFENSE SPENDING STEPUP will be one of the strongest props.

All signs point to a sharp acceleration in Pentagon contract letting.

The reasons: (1) current release of orders held back last spring in order to balance the fiscal '60 budget; (2) prompt release of "regular" fiscal '61 orders—thanks to early 1960 passage of the new military appropriation bill by Congress; and (3) cold war pressures.

All these should be enough to push fiscal '61 contract letting above the \$21-billion mark—compared to fiscal '60's \$18.9-billion. That means an additional \$2-billion pumped into the spending stream.

CURRENT TIGHT INVENTORIES make for another cushion.

With days' supply still relatively low, there's little chance of the huge inventory piling that precipitated the 1953-54 and the 1957-58 downturns.

In the latter recession, for example, business stocks tumbled from \$91.3-billion in September 1957 to \$84.7-billion in October 1958. That's a net decline in demand of some \$6.4-billion in just a little over one year.

No such drop is possible now. User inventories of metals and components are already down to rock bottom in many instances.

And even if you reduced over-all days' supply to early 1960 lows (duplicating conditions after the steel strike), it's doubtful whether total stocks would be cut by more than a few percentage points.

CONSTRUCTION will be another positive factor in the near-term business picture.

There are growing signs that we are pulling out of the current (mild) building slump. For example:

- Housing starts in August were up 8% over July.
- Structural steel bookings in the first eight months of the year were running 7% ahead of '59 levels.
- Construction contracts in August were up 7% over a year ago—the first such year-to-year gain in eight months.

All indicate a new construction record for 1961.

OTHER BULLISH FORCES to consider:

CREDIT—Recent easing of interest rates (the prime rate recently declined from 5% to 4 1/2%) should encourage more spending. It will also make inventory carrying charges less burdensome.

TRANSFER PAYMENTS—This "built in" stabilizer (which covers Social Security and unemployment insurance) is providing increasing purchasing power for those who need it most. Latest figures place these payments at a \$29.1-billion annual rate—\$2.4-billion more than a year ago.

EXPORTS—Booming European demand is providing a still-growing market for many of our goods. Total overseas shipments for 1960 to date are running 5% ahead of last year.

Ford and 11 Auto Suppliers Agree Not to Sell Used Parts as New

Washington — The Federal Trade Commission signed agreements last week with Ford Motor Co., and eleven major suppliers of clutches and other parts forbidding them to sell rebuilt products as new.

Earl W. Kintner, commission chairman, said he hoped the announcement of consent orders with the 12 companies "will convince members of the industry that the commission means to take effective steps to protect the many car owners who pay for new parts but actually receive rebuilt parts."

The stipulation agreements do not reflect any law violation by the companies or their officers.

They provide that the parts makers will not sell any product containing used parts without making a "clear and conspicuous" announcement of that fact in advertising, on containers, and on the products themselves. The agreements also provide that "used" markings on the products must remain legible after installation.

Kintner said the commission is not attacking the sale or quality of rebuilt parts, but stressed that its "sole concern is to insure that the consumer is not deceived about the condition of the parts that he buys."

Companies with which FTC signed agreements are:

Parts Exchange Cos. (Partex) of San Francisco, Los Angeles, Seattle and Portland; United Automotive Products, Inc., Portland, Ore.; Maremont Automotive Products, Inc., Chicago; Unit Parts Co., Inc., Oklahoma City;

Another Trucker Hitches Onto Leasing Bandwagon By Setting Up Subsidiary

San Francisco—Another major trucking firm is meeting the challenge of private carriage by "joining the trend."

Pacific Intermountain Express entered the truck leasing business on a nation-wide scale last week by establishing a new subsidiary, P-I-E Leasing Co., in Oakland, Calif.

Initially, this new subsidiary will offer full service truck and materials handling leasing, "providing everything but the driver." This program will soon be enlarged to include fleet cars and a broad range of industrial equipment.

P-I-E's new venture will be headed by Walter F. Mills, a former vice president of Ryder Systems and an experienced leasing executive. Ryder Systems is the leasing off-shoot of Ryder Trucking Co.

Mills said the new company will purchase equipment—either standard or customized—to meet each customer's requirements.

He added that some of P-I-E's existing equipment might be made available for leasing. In addition to leasing the equipment, the company will make surveys and analyze the client's requirements so that cost of operation is pre-determined.

Equipment maintenance, through P-I-E's already established shops, will be included in the service, as well as insurance.

Micro Products, Inc., Dallas; American Clutch Products, Inc., Dallas; Auto Parts Exchange Co., Inc., City of Industry, Calif.; ABCO Manufacturing Co., trading as Automotive Brake & Clutch, Atlanta; Neil Parts Rebuilding, Inc., Columbia, S. C.; Automotive Warehousing Co., Inc., trading as Friction Materials & Parts Co. and Friction Materials Co., Atlanta; Wholesalers Clutch Service Co., Inc., St. Louis, and Ford.

FTC Joins Probe of Identical Rock Salt Bidding

Washington — The Federal Trade Commission has joined in the all-out attack on alleged bid-rigging by rock salt producers.

This disclosure followed demands by a New York state official that Attorney General Rogers, the Department of Justice, and the FTC investigate two identical rock salt bids received by New York City earlier this month.

The Justice Dept. also revealed that it has been investigating alleged price fixing in that industry since early this year. This

was first disclosed by PURCHASING WEEK in a story detailing the anti-trust probe underway in Springfield, Ill. involving 14 major rock salt suppliers (see PW, June 27, '60, p. 34).

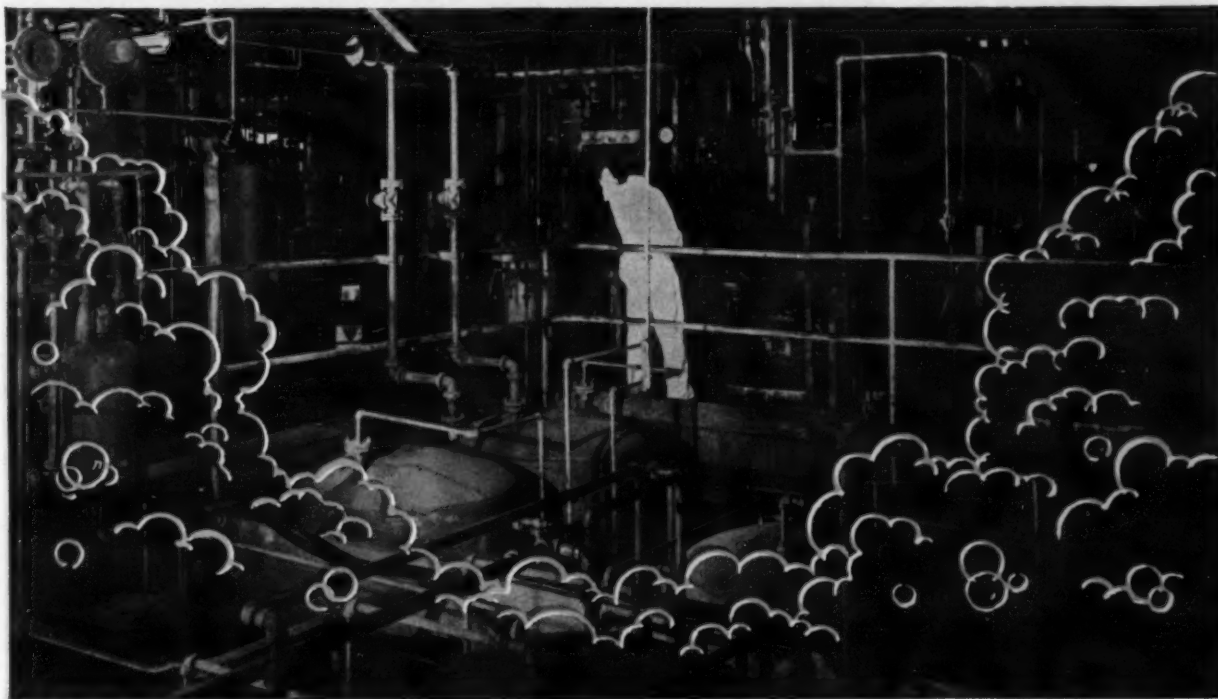
The ever-widening probe into the industry's price policies drew interest from another quarter last week when Myles J. Lane, chairman of the State Commission of Investigation, New York, asked the Justice Dept. to investigate identical bidding on New York City's \$700,000 annual purchases of rock salt.

It was then that the Justice Dept. disclosed a probe was already underway. It was also disclosed that the FTC has asked City P.A. Roger J. Browne for all information on such identical bidding gathered by the city since 1965.

The commission also said it was studying compliance with a 1943 cease-and-desist order against the Salt Producers Assn. and others banning concerted to fix or maintain prices or to regulate production and sale of rock salt.

SILICONE NEWS from Dow Corning

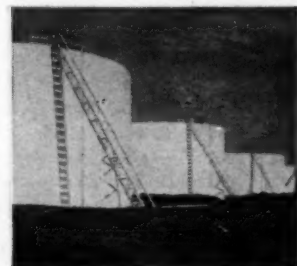
Foam Eating Into Profits?



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Washington Perspective

OCT. 3-9

The Federal Power Commission has moved to stabilize natural gas prices and insure future supplies. FPC, after six years of indecision on how to regulate rates charged by independent gas producers, has adopted a system fixing prices for each producing area.

The immediate effect probably will be somewhat higher costs to gas users. Most natural gas now is under contract at low prices, compared with newer sales. The commission found gas prices generally too low, and, once contractual obligations are fulfilled, producers will be free to seek higher rates within FPC boundaries.

A long-range trend toward increasingly higher prices is expected to be stemmed, however. Some new gas sales have been certified by FPC as high as 23¢ per thousand cu. ft. at the wellhead. (Wellhead prices are those charged by producers to interstate pipelines.)

FPC's adopted price guides won't allow new prices to go beyond 18¢ in the field in most Southwest producing areas.

The head-on clash over work rules between labor and management that sent the steel industry into a 116-day tailspin in the 1959-60 strike may be avoided in the railroad industry.

Labor Secy. Mitchell's conference between the nation's carriers and their five operating railroad unions to forestall a similar contest over working rules appears to have found a peace formula—temporarily, at least.

Both sides seemed ready to buy the Mitchell plan for a tripartite commission to study the issue and report back.

Mitchell moved to forestall a long battle over the carriers' demands for altering work rules to cut labor costs.

The proposed commission would not arbitrate the dispute, but would make recommendations on the railroad demands that the firemen be eliminated on diesel engines; that miles-per-day pay systems be changed; that restrictions on type of work handled by both yard and road men be lifted.

The unions are countering with demands for night and shift differential pay, a voice in the size of train crews, employment stabilization, and so on.

Defense agencies are moving to speed up construction of missile bases.

Since recent criticisms of delays, the Pentagon has consolidated contracting authority in a single missile base construction office and established criteria for prequalification of bidders. Last week, the Defense Dept. set up on-site systems to eliminate multiple inspections, and to assure monthly payments to contractors for added work resulting from change orders.

These improvements were among the suggestions offered by contractors and engineers to Defense Secy Thomas Gates, following a recent conference.

On construction control, the Army and Air Force agree that the contracting officer is the single authority that should deal with contractors. All field agencies are being so advised.

Don't put too much mind to the new small business "set aside" for government construction projects.

The provision that contracts under \$500,000 should be made available to small businessmen has created concern.

But the reality is this: The Army Corps of Engineers, and the Navy's Bureau of Yards and Docks can comply with the Congressional fiat without interrupting present custom too much. If a contracting officer sets up an exception to the set-aside rule, he won't be overturned unless the Small Business Administration, on a specific complaint, objects. Then a decision would be made.

Weekly Production Records

	Latest Week	Week Ago	Year Ago
Steel ingot, thous tons	1,545	1,547*	362
Autos, units	120,849	88,301*	95,323
Trucks, units	20,811	21,521*	23,814
Crude runs, thous bbl, daily aver	7,963	8,083	7,722
Distillate fuel oil, thous bbl	12,624	13,181*	12,155
Residual fuel oil, thous bbl	6,388	5,711	6,333
Gasoline, thous bbl	28,575	29,365	28,078
Petroleum refineries operating rate, %	81.4	82.6	79.5
Container board, tons	168,658	172,028	161,369
Boxboard, tons	97,045	96,035	99,732
Paper operating rate, %	92.4	72.6*	98.5
Lumber, thous of board ft	234,178	193,532	261,028
Bituminous coal, daily aver thous tons	1,355	1,320*	1,297
Electric power, million kilowatt hours	14,156	13,903	12,878
Eng Const awards, mil \$ Eng News-Rec	409.5	368.4	408.4

* Revised

C-E-I-R Gets First \$10-Million IBM 'Monster'

New York—A major vendor of electronic data processing services has rented the world's biggest electronic brain in a move to lower EDP costs to its clients.

The firm, C-E-I-R of Arlington, Va., will pay a \$300,000 monthly rental fee for IBM's STRETCH 7030 computer, which carries a \$10-million tag and is capable of 75-billion calculations daily. The computer will be installed in C-E-I-R's Los Angeles Research Center.

Although the company said it was too early to discuss exact charges, spokesmen estimated unofficially that the cost per machine hour would drop from present \$700 rate to less than \$100 per hour. They based their figures on the machine's lightning-like speed—it is claimed to have many times the capability of today's best computers.

Even more important than the immediate savings to its clients, the company says, is the computer's ability to come up with answers to problems that are too complex to be handled by any single existing EDP system. This capability for what the firm calls "total-problem solutions" opens up new applications to which STRETCH can be assigned. For example:

Transportation: Coordination of coast-to-coast dispatching, and integration with production scheduling.

Traffic Control: Continuous monitoring of traffic flows, and control of street signals to cope with minute-by-minute traffic conditions.

Medical Diagnosis: Creation of a central medical data file—accessible to hospitals and doctors throughout the country.

Also forecast were:

• Computer networks with satellite computers in plants and offices feeding the computer at Los Angeles service center via telephone lines or microwave relays.

• Simulations: Use of computer "games" for entire economies to test policy decisions.

Brass Mills Cut Prices Of Water Tube and Pipe

New York—U. S. brass mills posted another round of price cuts last week for important categories of copper water tube and pipe. The reductions on these items, industry sources said, dropped domestic prices 5% to 15% below imported quotations.

The new price landslide was kicked off by Wolverine Tube Div. of Calumet & Hecla, Inc., and by Revere Copper & Brass Co. Both firms cut prices for copper water tube from fractions to as much as 2½¢ ft. Other mills were quick to follow the move.

Major categories of copper water tubes affected are ½-in. and ¾-in. types K, L, and M. Reductions are also being made in certain sizes and categories of copper pipe and red brass pipe, regular and extra-strong.

The price cuts, average 5% and including reductions as high as 7½%, apply to quantities below 5,000 ft. or lb. as well as to larger quantities. The average 5% differential for orders above and below this quantity is retained in the new price schedules.

• More research assignments from universities that could never afford this expensive equipment.

"For the first time," said C-E-I-R president Dr. Herberg W. Robinson, "it will be possible to develop a method for balancing and controlling the many aspects of managing large decentralized corporations." Through a network of installations at various locations, for example, executives will be able to learn quickly the possible consequences of their business decisions. "The effect will be as if customers owned the computer and had it in their own office."

In addition, the executive declared, "at the STRETCH level of technology we will be able to give serious thought to simulating the entire U.S. economy, in order to determine the total effects and

implications of alternative economic policies."

Meanwhile, company reports, the computer will provide essential services on a daily or weekly basis for such conventional data processing jobs as payroll, material production control, bank and brokerage house accounting "all at considerable savings over present day costs."

By making the 7030 available to industry for the first time, C-E-I-R hopes to add \$10-million to its present annual sales volume, currently about \$6-million, Robinson disclosed.

G. E. Jones, president of IBM's Data Processing Div., termed the C-E-I-R contract a "milestone in the evolution of management science."

The first STRETCH computer will be delivered to the AEC's Los Alamos Laboratory.

Debut of 1961 Model Cars Reveals Detroit Holding the Line on Prices

(Continued from page 1)

new two-door model (at \$1,782) puts the Valiant's lowest price car in line with the cheapest Falcon (Ford) and Corvair (GM). The latter two in 1960 were selling for \$1,746 and \$1,810 respectively.

The complete spread of 1961 Valiant prices ranges from \$1,782 for the model noted above to \$2,217 for a four-door wagon in the V-200 series.

Buick: Prices here are virtually unchanged. Standard-size Buicks start at \$2,720 for the Lesabre two-door sedan and climb to \$3,795 for the Electra 225 convertible. A new four-door Riviera sedan not offered last year will settle in the price picture at \$3,942.

Invicta models range from \$3,129 to \$3,290, and Electras run between \$3,460 for the two-door hard top and \$3,566 for the four-door.

The compact Special is being offered for the first time. Price range here is \$2,175 for the four-door sedan to \$2,425 for the four-door station wagon.

Oldsmobile: A new standard-size Olds, the Holiday sedan, in the 98 series will go for \$3,658. The low price Dynamic 88 series costs between \$2,574 and \$3,165 for the three-seat Fiesta station wagon.

Super 88's go for from \$2,881 to \$3,436. Highest priced 98 is the convertible slated for factory list price of \$3,975.

The compact Oldsmobile F-85 will range from \$2,175 for the four-door sedan to \$2,425 for the four-door station wagon.

Pontiac: Pontiac's highest priced Bonneville series will be priced at \$3,225 down to \$3,040. Other prices remain exactly the same as 1960 models.

The compact Pontiac Tempest ranges from \$1,975 for a sedan to \$2,225 for a station wagon.

Dodge: Prices on the Dodge Polara have been reduced an average of 5½%. The reductions range from \$153 on the hardtop to \$197 on station wagons. Actual prices of these models are \$2,767 to \$3,011 respectively.

Dodge Darts will be priced the same this year as last.

The compact Dodge Lancer

ranges from \$1,832 for a two-door sedan in the 170 series up to \$2,257 for a six-passenger wagon in the 770 series.

Plymouth: Prices are being held steady for the second straight year. The Savoy series ranges from \$2,059 for the two-door model up to \$2,106 for the four-door.

The Belvedere ranges from \$2,179 to \$2,246. And the Fury starts at \$2,352 and goes up to \$2,717 for the convertible coupe.

Cadillac: Eight models go on sale with identical prices in 1961 and 1960 columns. The Sixty-two series starts at \$4,475 for the coupe and swings upward to \$5,950 for the Eldorado Biarritz convertible. This same convertible was tagged at \$6,817 last year.

This lower price reflects the elimination of options and accessories that were included at last year's standard price. Optional equipment prices remain the same.

Ford: Prices on all models of the Galaxie line are down by \$12 per car. This is Ford's best selling model—accounting for about 32% of its non-compact volume.

Small rises, however, are posted on the Fairlane (\$4) and the Fairlane 500 (\$39) series. New range for the Fairlane is \$2,055 to \$2,105; for the Fairlane 500 it's \$2,162 to \$2,212.

Station wagon prices remain basically the same as for 1960.

Aluminium Shuts Smelter Because of Weak Market

New York—Aluminium Ltd. closed down a smelter in Arvida, Quebec, last week because of what it called "current weakness" in North American markets.

Earlier this year, Aluminium had advanced its production schedule from 595,000 tons a year to 690,000 tons. The company said this was done to establish inventory levels to meet international sales requirements.

In closing the Arvida smelter, which produces 17,000/ton annually, the company said that while sales are well sustained abroad, the weakness in North American markets necessitated the production cutback.



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Purchasing Week

Airline Merger Plan Survives Initial Dogfight

Washington—The Civil Aeronautics Board has strongly backed United Airlines' stand on its proposed merger with Capital Airlines by turning down requests that major segments of the Capital route system be eliminated from the proposal.

The CAB decision was a sore defeat for five other airlines—Eastern, Delta, National, Northwest, and Allegheny.

The five had asked the CAB to delay the merger case and conduct a broad investigation of route systems. Delta had re-

quested that it be given or allowed to buy Capital's major North-South route.

United had told the board that if there were a long delay, it would "terminate the proposed merger." United also stressed it had "no interest in acquiring Capital's system with a major part of the torso missing."

Sources close to the CAB believe the decision indicates that the board will hand down a final order on the merger application by Feb. 1, the date by which United wants a ruling. They also

said the board's stand indicates it will approve the merger.

The board said that while deciding the merger case, it would not even consider whether any of Capital's routes should be transferred to other lines or junked completely.

But the board added that it could, as in any case before it, take a look at these questions anytime after the merger is decided. The decision is consistent with the CAB's attitude even since the merger application was filed Aug. 11.

Joint Rail-Water Rate Case Gets ICC Airing; May Set a Precedent

Chicago — Interstate Commerce Commission hearings got underway here last week on a joint rate agreement by a barge line and a railroad for movement of coal from West Virginia to Chicago steel mills.

Fifteen Eastern railroads are battling the Ohio River Co. of Cincinnati and the Chicago & Eastern Illinois Railroad of Chicago.

In contention: a joint rate

covering shipments of an annual one million tons of coal.

The route: via the Ohio River from Huntington, W. Va., to Mount Vernon, Ind., then to Chicago by rail.

The atmosphere here is heated. Joint rate making has been traditionally opposed by most railroads, while waterway operators hope the case will set a precedent for establishing joint rail-water rates. That Congress is watching the proceedings was borne out three weeks ago in a report from the Senate Merchant Marine Subcommittee:

Calls for Altering Rates

"Joint rail-water rates under the Interstate Commerce Act represent an area that concerns us. The present methods offered by the Commission for handling Joint rail-water rates should be altered to serve the public interest."

The Chicago & Eastern Illinois railroad sees rail-water rates as vital to its geographical position with terminals on Lake Michigan and the Ohio and Mississippi Rivers. The line's president, David Matthews, has scored the opposition of railroads to joint rates as "not in harmony with the provisions of the national transportation policy declared by Congress." He also said it is not in the best interests of the carriers themselves.

The hearings climax a six-year effort to fight the railroad's tieup with the barge line to deliver the West Virginia coal to Chicago steel mills. The water-rail route was established without joint rates in 1954. Eastern railroads countered with a 29¢/ton reduction of their all-rail rate at a revenue loss of nearly \$3-million, barge line officials estimate. Chicago & Eastern Illinois matched the cut but ran into trouble early this year when the ICC ordered the reduction cancelled, upholding charges by the Eastern railroads that it was not compensatory.

The Counter Move

As a counter-move, the barge line and railroad put into effect in June a joint rate of \$3.33/ton. This was 11¢ below the all-rail rate and 2¢ below the rail and water rates combined. The carriers claim that the joint rate benefits both companies equally by:

- Stepping up efficiency through raising the minimum shipment from 2,000 to 5,000 tons;

- Eliminating reweighing of the coal before transfer to the railroad at Mount Vernon.

- Reduction of paperwork through elimination of separate billings.

Railroads claim the rate is still too low. Purpose of the ICC hearings is to determine whether it will return a profit to both companies, and whether it should be permitted to go into effect.

The outcome of this case is bound to set a precedent in the industry which, if it favors joint rates, can lead to vast benefits to shippers in other product areas.

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2. Buy from a producer, not a repackager. Repackagers have uncertain supply, inadequate sales and engineering coverage.

3. Don't buy from a seller with an incomplete line. You may get sold an alloy that's not exactly right for your application; uneconomical, won't work, etc.

4. Buy from a company that has a first-rate distribution

organization; whose distributors themselves are big enough to give service, delivery, credit and counsel.

5. Buy from a manufacturer who produces products of first-line quality—who promises and *delivers* materials of accurate analysis, strict tolerances and unvarying dimensions, and delivers them where you want them *when* you want them.

6. Buy from a producer whose research people can work with you on unique or "exotic" applications; who has developed many of the classic alloys, whose *standard* list of brazing alloys (high & low temperature) is longer than that of any other producer.

Further details on the above can be had immediately from Handy & Harman, 82 Fulton St., New York 38, or any of Handy & Harman's distributors.

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DISTRIBUTORS IN PRINCIPAL CITIES

Retail Sales Slump Holds Down Industrial Buying

New York—The disappointing volume of retail sales is one of the major reasons why the post-Labor Day industrial buying splurge has failed to materialize. Declining purchases of appliances and other hard goods items have forced production cutbacks—and thus reduced demand for many raw materials and components.

Official government figures tell the story. In August, for example, hard goods sales totaled only \$5.7-billion (seasonally adjusted)—some 6% below the levels prevailing in August '59.

And the decline is general. Automotive, appliance, and furniture outlets all report substantially lower sales than a year ago.

Some of the reasons being given for the poor showing:

• **Consumer Attitudes**—The recent Michigan Survey of Consumer Buying Intentions (PW, 9/26) shows continued hesitance on the part of the public to shell out large sums of money.

Further verification comes from last week's Federal Reserve Board Survey which shows only modest plans for buying new cars and appliances.

• **Credit Drain**—Installment debt repayments are at record levels—siphoning off available purchasing power from current consumption.

• **Higher Service Costs**—Rising costs of services (they're up again according to latest cost-of-living data) mean less money available for purchases of "big ticket" consumer items.

Nondurable Goods Up

One optimistic sign is the continued growth in the sales of so-called nondurable goods outlets—a group covering apparel, department, and variety stores. Sales remain at record levels—4% above a year ago.

Continued optimism is forecast by most of the retailers in this area. Thus, a recent survey of the National Retail Merchants Association revealed that 75% of these soft goods stores expect second half sales to be above those of 1959. A median gain of about 4% is forecast.

Another optimistic sign is the continued rise of personal income to a new high of \$407.6-billion (seasonally adjusted annual rate) in August—up \$300-million from the previous month.

But it is questionable whether this increase will all be used to support new purchases, for the relationship between income and buying has shown signs of changing in recent months.

Sales vs. Income

As the chart above shows, retail sales have been following income very closely in recent years

Purchasing Class Opens In St. Louis Next Week

St. Louis—The first session of the Purchasing Agents' Assn. of St. Louis University's "Fundamentals of Purchasing" course begins Oct. 13.

The course is designed for newcomers to the purchasing field as well as P.A.'s in need of a refresher course.

The 14-session program is under the general direction of John D. Wright, assistant purchasing agent, Universal Match Corp.

—that is, they have until April of this year.

Note that since that time overall retail sales have been in a downward trend—despite the fact that income has continued to trend upward.

A few ratios illustrate the change over the past four months:

• In April retail sales took about 56½% of personal income.

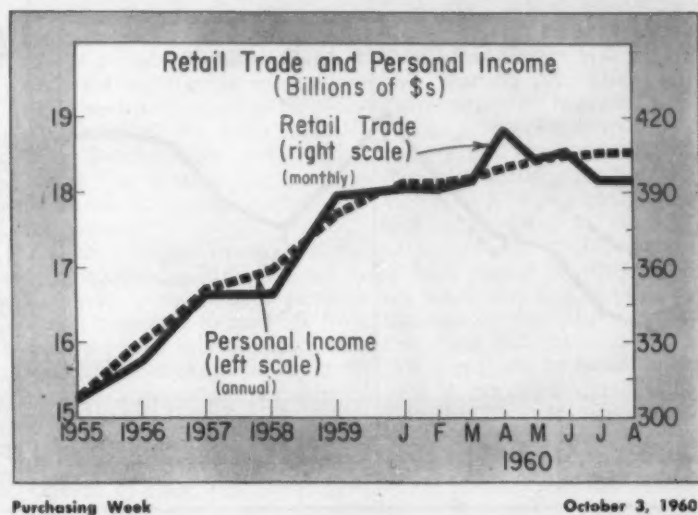
• In August the ratio had declined to about 53½%.

True, that's a drop of only 3 percentage points. But the im-

portant thing to remember is this: If the 56½% rate had been maintained, average retail sales would have been \$19.2-billion, seasonally adjusted in August (instead of actual \$18.2-billion).

This billion dollars a month is enough to make the difference between continued prosperity and today's faltering economic picture.

The next few months will be crucial. A ratio rebound to more normal levels could halt the current drift downward and perk up demand all the way up and down the production line.



General Electric Buys and Sells TOTAL VALUE

How a Creative Supplier Helps General Electric To Offer You Its Preferred Lighting Program

A CREATIVE SUPPLIER of special sheet aluminum for General Electric street and highway luminaires does more than provide a quality product at a competitive price. He contributes *added values*—one of which is a warehouse stock program that has cut delivery time from five weeks to three days and General Electric's in-process inventory from two months to two weeks.

GENERAL ELECTRIC purchasing management systematically appraises added values offered by each of the Company's 45,000 suppliers. These values, together with the product values and added values that General Electric itself provides, result in the greatest *total value* for General Electric customers.

THE PREFERRED LIGHTING PROGRAM is a good example of this. The supplier's improved delivery of aluminum is one of several factors that have enabled General Electric to offer exceptionally fast delivery of the most popular street-lighting equipment. Other factors: an electronic stock replenishment routine, "building block" design and manufacturing techniques. Fast delivery is supplemented by another added value: General Electric's new **PREFERRED LIGHTING Designer's and Buyer's Guide** simplifies the selection and application of equipment, saves the time and expense of individual lighting layouts.

PRODUCTIVE PURCHASING, An Approach to the Systematic Appraisal of TOTAL VALUE contains a check list to help you compare the added values of competing suppliers. For a copy of this booklet (GED-3877)—and the **PREFERRED LIGHTING Guide** (GEA-7100)—write General Electric Company, Section 666-06, Schenectady 5, N. Y.

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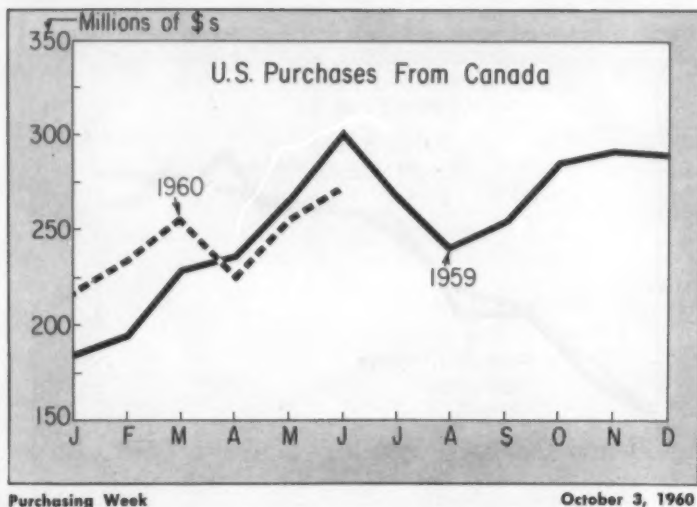
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NEW METHOD	3 DAYS

A SUPPLIER'S FAST DELIVERY of special sheet aluminum helps bring about fast delivery of G-E street-lighting systems.

THE PREFERRED LIGHTING PROGRAM includes the equipment types most popular with customers. Only 148 catalog numbers (of 5000 available) meet 95% of all roadway lighting needs.





Canada Pushes for Increased Sales in the U.S.

Montreal—Canada is making an increasingly stronger pitch for sales in the United States. Vendors from north of the border are pushing highly specialized products, as well as the more familiar Canadian raw materials.

The reason for this increased Canadian promotional activity is four-fold:

- Canadian sales to the U.S. are below year-ago levels (see chart left) after a good early pace. The prospect is for little pickup, and Canadian exporters are in-

tensifying their efforts to maintain their business volume.

- Exports to Europe are almost 30% above 1959, but are leveling off—which means even more attention will be paid to U.S. customers.

- The premium on Canadian dollars vis-a-vis U.S. currency has been slipping since the beginning of the year. Canadian exporters usually quote prices in U.S. dollars thus absorbing the loss in exchange. The smaller the

Canadian premium gets, the lower the exchange expense to Canadian firms.

- Finally, the disappointing level of U.S. business has reacted upon the Canadian economy in the form of mounting inventories of raw materials and finished products. This leads to pressure to shade prices.

The combined exports of lead, nickel, and zinc to the U.S., for example, are running some 10% below year-ago levels, while output is more than 7% ahead of 1959.

In copper, the first half saw a substantial increase in Canadian exports, but there also was a solid increase in production. And poor demand in the second half has brought about a 1¢/lb. price cut for copper by International Nickel and Canadian copper refiners.

Also, Canadian copper fabricators have stepped up their competitive efforts in the U.S. markets. In some quarters, Canadian competition is considered one of the prime reasons why American brass mills lowered their prices on copper sheet recently.

Raw Materials Supplier

For most P.A.'s, Canada is still primarily a supplier of raw materials or semi-fabricated materials (these account for 75%-80% of Canadian sales to the U.S.). But the fact is, as one Canadian bank official stated, "Canada is rapidly developing its secondary industry, and is devoting a great deal of technical and market research to building up markets for industrial products."

This research has led to two developments:

- An increase in new products for the domestic market by Canadian firms. Aluminium, Ltd., for example, has come out with two new items being marketed in the U.S.: a curve-sided aluminum hopper car (see PW Sept. 12, '60, p. 31) and a new, light, guide transmission tower for electrical power transmission. The company is also working on a new cost-cutting smelting process that would eliminate the alumina step in the production of the metal from bauxite ore.

- Some increase in Canadian investment in the U.S. Canadian plants are sometimes located in the U.S. to minimize tariff costs—when the duties on raw materials amount to less than the duties on the finished products if they were shipped from Canada.

For example: a valve and steam-trap plant in Buffalo; a hydrogen cell plant in the same city, and several die casting and plastic molding plants in Northern states.

Evans Buys Executive Units

Plymouth, Mich.—Evans Products Co. has purchased the Executive Units Div. of the General Plywood Corp., Louisville.

Evans' Haskelite Mfg. Div. will take over the production and sales of Exec-Units, a free standing type of movable office partition.

Copper Alloy Bulletin

**BRIDGEPORT
BRASS
COMPANY**



new BRIDGEPORT NIRONZE® 635 gives 90,000 psi yield strength

90,000 psi Yield Strength Obtained with New Age-Hardenable Copper-Nickel-Silicon Alloy

Bridgeport Nironze 635, an age-hardenable copper-nickel-silicon alloy, combines excellent cold-working properties with high tensile and very high yield strengths, good electrical conductivity, excellent general and stress-corrosion resistance. Supplied in the solution-treated and drawn condition, Nironze 635 offers exceptional cold-working properties. A low-temperature heat treatment, following additional cold-work age, hardens this alloy to produce tensile strengths of 100,000 psi, yield strengths of 85,000 psi and improved electrical conductivity of a minimum of 35% IACS.

Easily Cold-Formed...Machined

The excellent cold-working properties of Nironze 635 in the solution-treated and drawn condition allow such severe cold work as upsetting, cold-heading, roll-threading, bending, forming or similar operations to be carried out with ease. Heat treatment following this cold-work age-hardens this alloy to produce maximum tensile and yield strengths.

Nironze 635 in the solution-treated-drawn condition has a machinability about 30% of free-cutting brass rod, thereby making it possible to carry out such conventional machining operations as sawing, grinding, turning, milling or similar operations.

Maximum cold-work may be performed on Nironze 635 in the solution-treated or



soft condition. In order to obtain highest possible physical properties, this alloy must be cold-worked from 50-80% before aging.

Proved by Performance in These Applications

Cold-headed bolts and fasteners used in pole line hardware, switch gear, wire connectors, neon signs, railway equipment, exposed electrical parts and structural supports, marine hardware and fittings can all use Nironze 635 to advantage. The new alloy's unique combination of high yield and tensile strengths, good conductivity and high corrosion resistance pro-



Typical connectors which benefit from high yield strength of NIRONZE 635.

vides design and production advantages never before offered by a silicon bronze.

Test a Sample Now

Nironze 635 has been thoroughly evaluated in the laboratory and in the field to insure the high quality and top performance common to all Bridgeport alloys. To get your test samples and full technical information, call your nearest Bridgeport Sales Office. Or write us direct: Dept. 4010. Nironze 635 is presently available as rod or wire, supplied in the solution-treated, solution-treated and drawn, and solution-treated, drawn and aged.

NIRONZE PHYSICAL PROPERTIES

Density	0.320 lb./in. ³
Color	Red, similar to copper
Thermal Expansion	8.9 x 10 ⁻⁶ /°F
Melting Point	1990°F
Nominal Composition:	
Copper	97.5%
Nickel	1.9%
Silicon	0.6%
Total	100.0%
Electrical Conductivity, % IACS	
Cold-drawn and aged	30%
Cold-drawn	15%

MECHANICAL PROPERTIES (Nominal)

Form	Condition	Tensile Strength psi	Yield Strength psi	Elongation % (4D)	Contraction of Area %	Rockwell B Hardness	O/O IACS
Rod and Wire	Solution-Treated	40,000	12,000	50	90	7	24
	Solution-Treated, Aged	88,000	70,000	12	20	26	43
Wire	S.T. Drawn 50%	65,000	62,000	18	27	67	22
	S.T. Drawn 50%, Aged	100,000	90,000	12	25	95	42
	S.T. Drawn 80%	70,000	65,000	15	25	73	22
	S.T. Drawn 80%, Aged	103,000	97,000	17	62	96	39

COMPARATIVE RATINGS OF NIRONZE 635 vs STANDARD SILICON BRONZES

	Physical Properties			Fabrication Properties			Mechanical Properties		
	Electrical Conductivity (Annealed) % IACS	Melting Point °F	Density lb./in. ³	Cold Workability	Machinability Rating	Annealing Temp. °F	Tensile Strength psi	Yield Strength psi	Rockwell B Hardness
NIRONZE 635	35	1990	0.320	Excellent	30	250-300	100,000	85,000	95
High Silicon Bronze (A)	7	1880	0.308	Excellent	30	900-1300	108,000	60,000	95
Low Silicon Bronze (B)	9	1940	0.316	Excellent	30	900-1250	90,000	67,000	90

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*Drawn and aged **Aging temperature



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Payoff Nears in Remington Rand Overseas Move

New York—Remington Rand Division of Sperry Rand Corp. is moving faster than originally anticipated to put its standard and portable typewriters into production abroad.

With all manufacture of non-electric typewriters to be moved from its Elmira, N. Y. plant to Europe, Remington Rand expects to make its first shipments to the U.S. between late October and the first of the year, PURCHASING WEEK learned. Parts for both portable and standards already are in production at three overseas plants.

Price Cuts Hinted

The new models are expected to be priced below comparable U.S. makes, a company spokesman told PW. No estimates were available on how much lower these prices would be. "We don't know ourselves," one company spokesman said, "but since the move is being made primarily to offset cost advantages of foreign competition, naturally, these savings will be passed on in price."

Remington Rand also expects to increase production of office and portable typewriters with lower European labor costs in their favor, but it is more probable that the increased output will find its way into the European market, where the electric typewriter has not made the tremendous inroads that it has in the U.S., the company said.

Layoff at U.S. Plant

A 15%-20% cutback in its 4,300 employees at the Elmira plant is expected as a result of the move, said Remington Rand Div. President Dause L. Bibby. He was hopeful that new products intended for manufacture at the Elmira plant would absorb most of the layoff. He declined to say what these new products were, except that they would be in the business machine line.

Remington Rand's overseas portables will come from its plant in Hillington, Scotland (which has been manufacturing a higher-priced noiseless standard for U.S. export right along). The standards will come from plants in Lyons, France and Naples, Italy. Remington Rand's other European plants are in Frankfurt (where it owns Torpedo Werke GmbH, which makes the "Torpedo" portable, exported to the U.S.), and Holland. It also has plants in Argentina, Brazil, Calcutta, and Japan.

Follows Tariff Bid

The move by Remington Rand comes on the heels of an effort last spring by two manufacturers, Smith-Corona Marchant, Inc., and Royal McBee Corp. to impose a tariff on foreign-built typewriters which now enter the country duty-free. Their efforts were unsuccessful but both companies indicated that they will continue to seek "some alleviation through the tariff method."

Smith-Corona's answer to the white-hot competition in the typewriter field lies in general in these more immediate areas:

- Increased emphasis on their line of more expensive machines, where labor costs do not absorb as large a percentage of the total profit. For example, a bigger push is expected from S-C on its line of electric portables as well as

the high end of the manual line.

- Consolidation of facilities for more economic operation. Products formerly made at the Syracuse plant, closed earlier this year, are now being produced at Cortland and Groton, N. Y.

- Continued import of its lightweight portable made in England. The company also owns Empire Typewriter in England and has assembly plants in Canada and Belgium.

Smith-Corona does not see

overseas moves as the answer to price stability. "It's the man who comes up with something different who will be able to keep prices stable," a spokesman said. He cited S-C's new compact electric, marketed at the price of a manual typewriter, as an example of what he meant.

Royal McBee shows no signs of following Remington overseas, despite union claims that such a move would be made. Said a spokesman for the company, "with a plant in Springfield, Mo. opened last year with the most

up-to-date facilities for production of portables, and our plant at Hartford undergoing modernization, we would scarcely be planning a move. We have naturally been weighing the possibilities, but at the moment we have no intention of going out of the country."

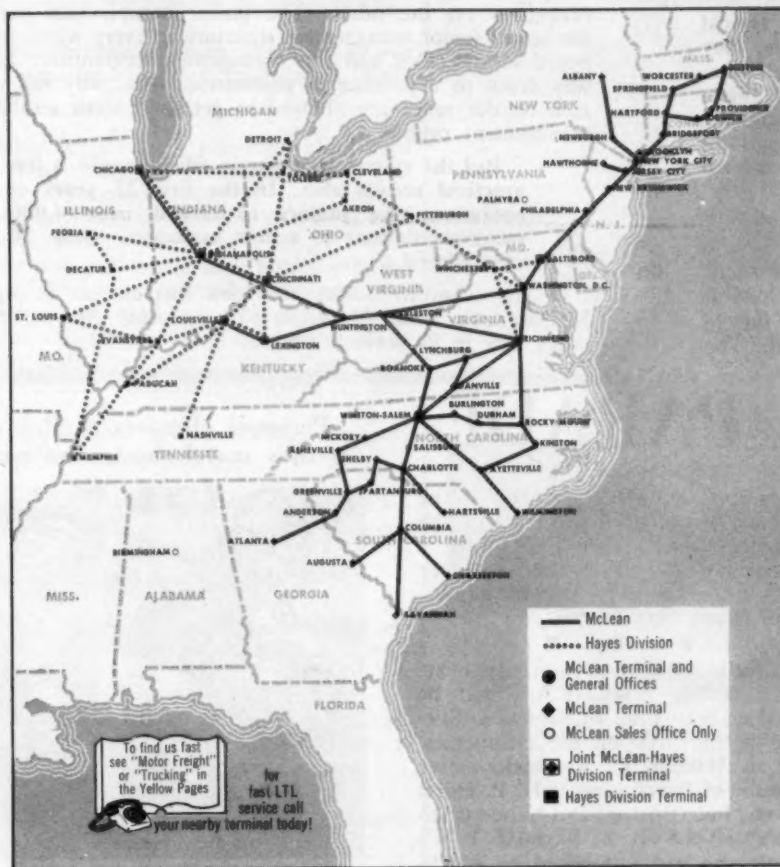
Like Smith-Corona, Royal McBee counters foreign competition with a lightweight portable which it imports to the U.S. from its two plants in Holland. Office typewriters manufactured in its European plants are not shipped to the U.S.

Even though 70% of the stock of Underwood Corp. is owned by Olivetti of Italy, this company is

firm in its position that the Remington Rand move will not affect the location of Underwood's manufacturing facilities. With proper production schedules, machinery, and management, we can turn out a top quality machine in the U.S. at as competitive a cost as anywhere in the world," an Underwood spokesman said.

With regard to cost, Remington Rand may find its price range dictated by the "Buy-American" law, some industry observers feel. Whether it will be forced to accept bids at the levels established by Congress for export goods will be seen when the first of its new typewriters manufactured abroad begin coming into this country.

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P/W MANAGEMENT MEMOS

A collection of timely tips, quotations, and inside slants on management and industrial developments, along with a run-down of events and trends of use to the purchasing agent.

The Lady or the Computer

The likelihood that we are entering into an era of electronic decision making has awesome implications. Suppose, speculates an expert, that most computers have equally good sources of information—and can figure out not only what one company should do, but also what a rival firm's computer has figured out. No company secret would be safe from the prying brains of the electronic monsters. The only safe course, the expert concludes, would be to let some capricious human—say, your wife or secretary—make the decisions. That way your company would be safe from the machine—which would be just as helpless in the face of feminine intuitions as most males are.

The Image and the Job

The depth probes are at it again. This time they're out to track down the mental images that people get when they are confronted with the different types of business functionaries—accountants, engineers, account executives, etc.

The study, conducted by two Michigan State University researchers, was inspired by the idea that such images tend to color the way people react to the function itself, although they may never have met anyone holding such a position before. Their reaction, in turn, (so the theory goes) makes the jobholder conform more and more to the stereotype.

The test group was asked to describe typical men who held various jobs. For example, they found that "careful, methodical, economical, practical, patient, reserved, steadfast" were the adjectives used most often to describe accountants. Advertising men were characterized as "gregarious, self-confident, aggressive, active, optimistic, adventurous, witty, responsive, purposeful."

Kilroy Was Here

Salesmen have discovered a new gimmick for keeping the memory of their last call green in the P.A.'s mind.

It's a toy reproduction of the product they're selling, complete down to the last detail. The

salesmen leaves it with his calling card—in the hope that it will keep kicking around the top of the P.A.'s desk as a paperweight or conversation piece.

These industrial miniatures are the work of a toy firm, Merry Manufacturing Co., Cincinnati, which suddenly found itself swamped with orders from salesmen who had discovered the sales merits of the firm's regular line of children's doctor and grocery store sets. Now Merry is busy turning out miniatures of everything from office furniture to washroom supplies and pencils.

Multiple Management

The Gantt Medal for distinguished achievement in management goes this year to Charles P. McCormick, board chairman of McCormick & Co., and the inventor of the "multiple management system."

The award, made jointly every year by the American Management Assn. and the American Society of Mechanical Engineers, is belated recognition of a system that's been in effect at McCormick's own firm for some 25 years, and has been adopted by many firms around the country.

The new system sets up a dual management structure, composed of junior executives on the one hand, and senior executives on the other. The junior organization parallels the actual senior management structure in every way—from a board of directors and top management committee, all the way down to a production committee. That way the young men on the move are allowed to get their teeth into actual management problems.

But the system isn't purely educational—it has practical results also. In the first 25 years of operation, the juniors forwarded over 4,000 recommendations to senior managers. Only 20 were turned down.

If you want to pursue the idea further, get a copy of McCormick's book, "Multiple Management" (Harper Bros.)—it's now in its seventh edition.

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PURCHASING PARADE



HALF-CENTURY ANNIVERSARY: Fifty years ago, Borden Co. specialized in dairy products—and its P.A.'s chief concern was to keep the larder filled with such items as hay, oats, coal, and horseshoes.

The hay and oats have long since given way to gasoline; horseshoes have been replaced by automobile tires; coal is now playing second fiddle to fuel oil and natural gas. . .

Wayland P. Morse, General P.A. of The Borden Company, (New York) has seen all these great changes take place. He is now observing his 50th year of service—all in the purchasing department—with Borden's, and has headed his department for 26 of those years.

He is shown above (left) at an anniversary luncheon with his wife, Gertrude, and Borden President, Harold W. Comfort.

Morse is a former member of the National Assn. of P.A.'s and of the National Coffee Assn. He's also a member of the Ridgewood Country Club, Ridgewood, N. J., and the Winanno, Mass. Golf Club.

In the November election, now nearing a boiling point, P.A.'s will be found on both sides of the fence. Stirring up the fires on the Democratic side, is William C. Kendrick, active Director of Purchasing at H. P. Hood & Sons, Inc. (Boston) and National Director of the New England P.A.'s Assn., who has announced his candidacy for the Democratic nomination as County Commissioner of Norfolk County (Mass.).

Kendrick has a long record of experience in municipal business affairs. He is former president of the Norwood Community Chest and is presently a member of the Norwood Industrial Committee, Recreation Advisory Committee and a trustee of the Union Savings Bank of Boston.

Meet two fellows with a mutual interest in their work.

They are the Kerns brothers—Jack J. and James E.—who have recently been promoted to Director of Purchasing and General P.A. respectively at the Sales Corp. of America (Dresher, Pa.).

Both started at Sales with their first jobs and moved up together to top positions in their department.

Personal glimpses of P.A.'s as they march by in the news



OLYMPIC CHAMPION: P.A. Al Oerter has been throwing his weight around, not only at his usual field of purchasing at Grumman Aircraft Engineering Corp. (Bethpage, N. Y.), but more recently in Rome as a member of the U.S. Olympic Team. Our gold-medal winner is shown above heaving the record-breaking discus to a 194 ft.-2 in. victory.

One of the few U.S. track and field stars ever to win gold medals in two Olympics—he was also champ at the '56 Games in Australia—Oerter is a graduate of Kansas University and now competes for the New York Athletic Club. His wife, Corinne, is not only his greatest fan, but has a job keeping her husband on the health diet to which he attributes much of his athletic success.

Oerter already is looking forward to the '64 games in Tokyo.

PURCHASING WEEK ASKS . . .

How do you handle the problem of "pre-purchasing" by other departments?

Questions asked by: **H. E. Holzworth, Director of Purchasing**
H. L. Green Co., Inc., New York



G. L. Petrie, purchasing agent, R. E. Dietz Co. (lanterns, torches, flares, etc.), Syracuse, N. Y.:

"We had been troubled by this fairly regularly but solved the problem in this way: When an invoice is received that does not bear a purchase order number or other acceptable information as to what authorization the supplier had in making the shipment or performing the service, it is returned with a form stating that until an authorized order is forthcoming, the invoice cannot be honored for payment. After one or two experiences of this nature, our suppliers are very helpful in being sure they have authorization from purchasing."



R. S. Rice, director of procurement, Laundry Group, Whirlpool Corp., St. Joseph, Mich.:

"We have a firmly stated policy that all commitments are to be made only by the procurement section. Sales representatives are required to obtain clearance to other departments through the appropriate buyer and are also charged with the responsibility of keeping that buyer informed of his progress. Each department acquaints the buyer with its wants and, wherever possible, the buyer is present during the development conversations. Therefore, each buyer is equipped to give intelligent attention to the individual's needs. Finally, all sources are selected by procurement."



W. W. Black, purchasing agent, Diamond Power Specialty Corp. (power plant equipment), Lancaster, Ohio:

"This problem has been generally eliminated in our company through a continued program of co-operation and understanding of their requirements. Pre-purchasing will remain at a minimum as long as purchasing operates as a service organization. We also initiated a field purchase order for up to \$50 to take care of emergency purchases in the field—and, of course, occasional night or weekend emergencies at the factory which require immediate purchases. Other than these, pre-purchasing does not raise a problem for us."



S. L. Mayo, director of purchasing, Freeport Sulphur Co., New Orleans:

"With isolated mining properties remotely located from the purchasing department, pre-purchasing flares up occasionally, usually in the guise of an emergency requirement. When it occurs we review with the person involved the reason for the particular commitment, calling attention to the company policy of centralized purchasing responsibility and the fact that we can secure just as prompt service with fewer misunderstandings when proper channels are utilized. Usually these problems can be worked out by a frank discussion."



H. C. Weber, purchasing agent, Hammermill Paper Co., Erie, Pa.:

"We do not feel we have any real problem here, as practically ideal conditions of cooperation exist between the purchasing department and the many mill departments we serve. We attempt to give the type of service and availability that proves we can obtain the material and services they want more exactly, more promptly, and at better value for the company's dollars spent. We realize that in an emergency case, or in unusual circumstances, orders must be placed by other than purchasing and controlled arrangements are established."

NEXT WEEK—OCT. 10

Six purchasing men answer this question:

Which of your reports to management do you value as most effective? Why?

You can suggest a question to be answered in this department by writing:

PURCHASING WEEK Asks
330 West 42nd St.
New York 36, N. Y.

Follow-Up: Letters and Comments

Of Mice and Men

Jackson, Mich.

I read with interest the article in the Sept. 19 issue concerning the high-frequency sound device to drive rats from cover ("Cleveland Concern Builds Pied Piper to Drive Out Rats," p. 44).

I don't know whether we would ever have a definite use for such a device but our Health Department does have a responsibility for enforcing control of rat-infested areas—and we are not overlooking any bets.

Lloyd M. Head
City Purchasing Agent

Tax Map

Los Angeles, Calif.

In your Sept. 5 issue, on page 13, you show a Tax Map, Buyer's Guide to Gasoline and Sales Taxes.

Where may I secure more copies?

Robert M. Calais
Assistant Purchasing Agent
Alberts Milling Co.
Division of Carnation Co.

• We suggest you write to: State Tax Review, Commerce Clearing House, Inc., 4025 Peterson Ave., Chicago 46, Ill.

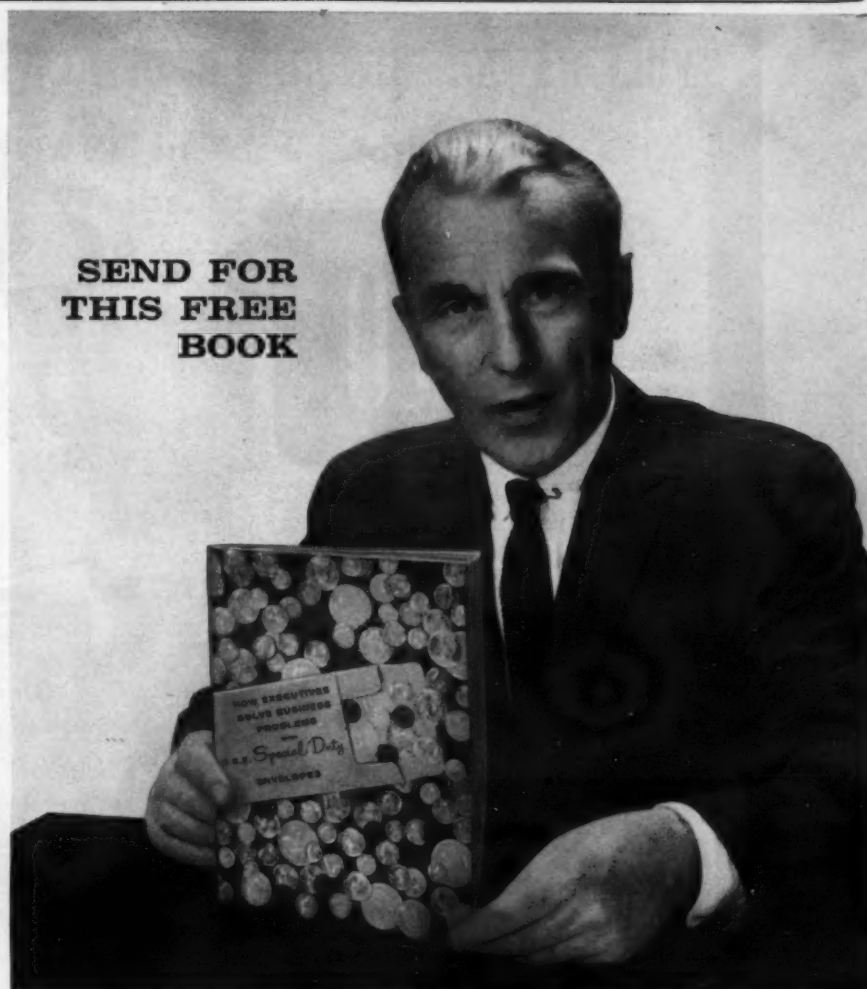
Plastics vs. Metals

Springfield, Mass.

We would like to have your permission to reproduce and use for direct mail purposes, the article "Prices of Plastics vs. Metals," which appeared in your Aug. 1, 1960 issue (p. 12).

R. J. Whelihan
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EX-5

Transportation Delays Nettle the Booming Electronics Industry

Los Angeles—P.A.'s in the booming electronics industry here are campaigning to combat serious transportation delays from suppliers.

Faced with the need to keep capacity production lines rolling, buyers have turned to their local association, the Los Angeles Purchasing Agents Association, for some answers.

The group has just completed a study, in conjunction with the L. A. Chamber of Commerce, which pinpointed the cause of

the time lag: Too many—almost 40%—of the West Coast electronics industry's suppliers are in the East or Midwest.

Another group, the Association of Electronics Distributors, also has joined the C of C and the P.A. Association in studying the problem. Here are a few tentative solutions the three organizations have suggested:

• **Air Shipment.** Litton Industries, Lockheed Missiles Div., and Bendix Pacific Div., among others, report increased reliance

on either air freight or air express. Some suppliers, such as Raytheon Co., even have established a policy of shipping all orders to the West Coast by air.

• **Encouragement of Suppliers to Move West.** Gerry Heath, Litton P.A., insists the only way out of the current delivery dilemma is to encourage manufacturers to establish adequate inventories on the West Coast in their own warehouses, factory sales offices, branch factories, or through distributors.

• **Inventory Build-Up.** Robert N. Huntoon, assistant director of purchasing at Bendix and chairman of the Los Angeles P.A. Association's Aircraft-Electronics Group, said his company receives its first month's requirements on a contract by air in one fell swoop.

None of these alternatives, however, offers a clear-cut solution to the delivery problem.

The AED study points out that air shipment, for example, often produces greater delays

than shipping by truck because flights are held up until a plane has a complete load. Then, too, shipments must be handled at both airports, also causing delays and often resulting in damage. Trucking eliminates multiple handling and often permits direct door-to-door shipment of orders.

Another objection to air shipment is the expense. Emergency air express deliveries cost twice as much as air freight.

Keeping Inventory Up

Don Dressen, President of Electronic Supply Corp., and chairman of the AED board, says his firm is trying to lick the problem by maintaining inventories on a quarterly basis.

"But," he admits, "there is a real problem in trying to crystal ball it. One sudden order might deplete our entire stock."

Another reason the West Coast industry and their Eastern suppliers are reluctant to maintain big inventories here is obsolescence.

"Things change so fast," says Art Pearson, procurement specialist for Lockheed, "that manufacturers are scared to stock because of the constant danger that their inventories might soon become obsolete."

Industry-Wide Review Urged

Pearson advocates a complete industry-wide review of out-of-stock conditions. "A tremendous waste results from the inability of vendors to properly service their customers on the West Coast," he says.

Some manufacturers are beginning to build their stocks on the West Coast. Texas Instruments, for example, is expanding its distribution channels, while Bomar Instruments has recently established a Pacific division. Among tube manufacturers, Tungsol, Sylvania, and Raytheon recently switched to factory offices on the West Coast. Amphenol is also making its electronic hardware available here through its new sales office.

Dressen has another solution, which could eliminate the whole problem of delivery lag: Get Eastern suppliers to give the Western industry preferential treatment.

Time Lags Forgotten

"We're in a constant fight with the factories to recognize this time lag," Dressen says: "The best we can do now is 10 days to two weeks by normal delivery methods. To expedite orders, we often have to go to the expense of telegraphing and in many cases have to require that at least a portion of the order be shipped by air."

Pearson adds, "We have between 2 and 2½ deliveries for every scheduled delivery. In other words, an order for 10 parts dribbles in in three separate shipments, requiring three separate receiving and inspection operations. If we order 100 parts, we can usually expect to get only 15 of them on time."

"These partial shipments," he said, "are undoubtedly the result of the manufacturers trying to keep everybody happy. But the effect is that nobody's happy."





SEMS

These efficient screw-and-lockwasher assemblies are successfully used for cost-saving in thousands of manufacturing plants. Many are made by ELCO — because ELCO has the equipment, and the experienced people, to make them well. Illustrated here are a couple of standards — and a number of "specials", designed and tooled by ELCO to suit unusual and specific requirements. *Buy your standard SEMS from ELCO — let ELCO design your special SEMS.*

SEMS

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In the World of Sales...

Stacy C. Hinkle was appointed vice president-distribution of all branches of **Mine and Smelter Supply Co.**, Denver, Colo.

Stuart W. Johnson has been appointed product sales manager of transformers, **Delta-Star Electric Div.'s Electric Service Works**, H. K. Porter Co., Inc., Philadelphia.

Harry R. Cote was named regional sales manager, Plaskon plastics and resins, **Plastics & Coal Chemicals Div.**, **Allied Chemical Corp.**, Lynwood, Calif.

Louis W. White was promoted to assistant sales mgr., **Weller Electric Corp.**, Easton, Pa. **Russell Winkelmann** and **Donald Rattee** have been named regional sales managers with headquarters at Detroit and Richardson, Tex., respectively.

S. Manuel Pearl has been elevated to sales vice president, **Circle Wire & Cable Corp.**, Maspeth, N. Y.

Byron H. Darst has been promoted to manager of industrial product sales, **International B. F. Goodrich**, Akron, Ohio.

Joseph N. Wolf has been advanced to assistant vice president, sales, **Western Carloading Co.**, Los Angeles.

William D. Benjes has been assigned the new post of vice president-sales, **Endicott Johnson Corp.**, Endicott, N. Y.

Robert G. Lynch succeeds W. O. Spink, vice president-sales, as sales manager for **Sylvania Electronic Tubes Div.**, **Sylvania Electric Products, Inc.**, New York.

L. W. Christenson retired as vice president in charge of sales, **Cleveland Graphite Bronze Div.**, **Clevite Corp.** W. D. Cowgill, general sales manager, takes over his duties.

Frank W. Abernathy was named district sales manager, **Chemical Div.**, **Eastman Chemical Products, Inc.**, Framingham, Mass.

Lloyd F. Bragg has been made southern division sales manager of **Van Norman Machine Co.**, a division of **Van Norman Industries, Inc.**, Birmingham, Ala.

George C. Robertson has taken the post of Miami district manager, P&H construction and mining equipment, **Harnischfeger Corp.** Robertson, formerly with J. I. Case Co., replaces Jack E. Laffey, who became regional manager for the entire eastern division.

Harold G. Munn has been appointed district manager of **Weston Instruments Div.**, **Daystrom, Inc.**, Cincinnati.

Joseph Leighton was promoted to district manager-mining tool sales, **Metallurgical Products Dept.**, **General Electric Co.**, Detroit.

Irvin C. Turner has moved up to Charlotte, N. C., branch manager, **National Electric Div.**, **H. K. Porter Co., Inc.**

Thomas J. Kemble, formerly of **Harnischfeger Corp.**, Milwaukee, joined **Buck Equipment Corp.**, Cincinnati, Ohio, as manager of railroad sales.

George E. Doty has been elevated to vice president and general sales manager in charge of all sales activities by **Grove Valve & Regulator Co.**, Oakland, Calif. **B. J. Hancock** becomes vice president-sales with responsibilities for all field sales and **E. C. Bird** has been named a district sales manager. Both will be stationed in Houston.

Paul C. Boorse has retired as manager of purchases for **Congoleum-Nairn, Inc.**, Kearny, N. J., after 40 years of service.

He joined the firm in 1920 as a buyer. He was made purchasing agent in 1947 and manager of purchases in 1956.

George L. Miller has been pro-

This Changing Purchasing Profession



P. C. BOORSE

moted from assistant purchasing agent to purchasing agent, **Firth Sterling, Inc.**, Pittsburgh. He succeeds Harry K. Stern who retired after 45 years with the firm.

Hardy G. Ross has been moved up to general purchasing agent for **Western Electric Co.**, New York. He will succeed Gus F. Raymond as head of purchasing and traffic when Raymond retires Dec. 1.

Howard C. Wolf, manager, purchasing, **McCormick & Co.**, Baltimore, Md., was elected

president of the **American Spice Trade Assn.**

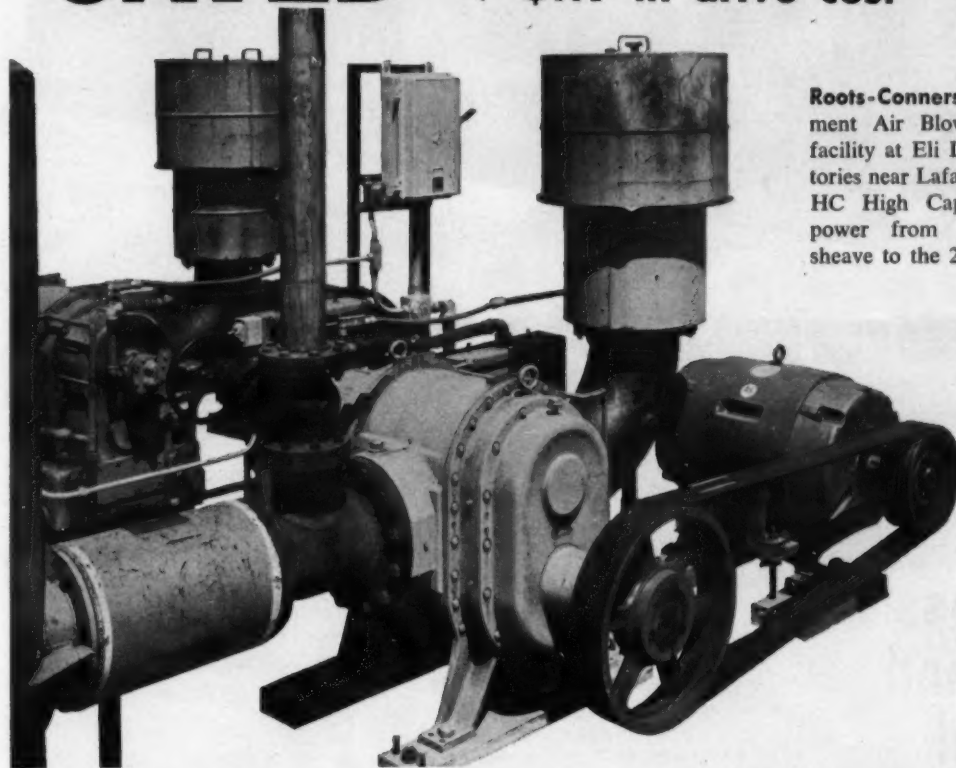
Obituaries

Edmund J. Gentner, 51 purchasing agent for the **E. I. du Pont de Nemours** plant in Niagara Falls, N. Y., died Sept. 12.

Raymond J. Mauer, retired purchasing agent for the **Detroit Controls Div.**, **American Standard**, died Sept. 12. Mauer was a former president of the **PAA of Detroit**.

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SAVED { **6 7/8" in face width**
97 lbs. in drive weight
\$119 in drive cost



Roots-Connersville Positive-Displacement Air Blower on waste-treatment facility at Eli Lilly Company's Laboratories near Lafayette, Indiana. Six Super HC High Capacity V-Belts transmit power from the 13.2-inch DriveR sheave to the 21.2-inch DriveN.

For each blower that Roots-Connersville supplied for the Lilly Laboratories at Lafayette, Indiana, original drive specifications called for 11-groove sheaves using standard belts.

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They could — and did. Instead of 11-groove drives, regular 6-groove Super HC Sheaves and Super High Capacity Belts were shipped from stock... arrived at

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TPA538

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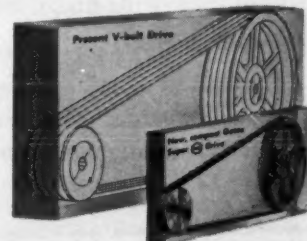


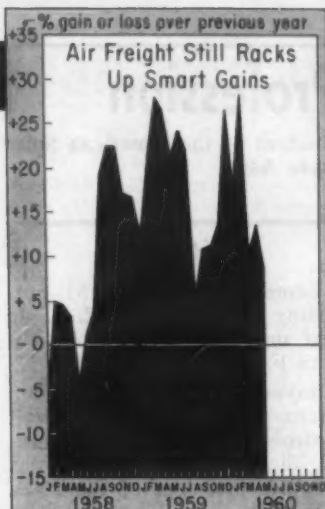
World's Largest Maker of V-Belts

Gates Super HC V-Belt Drives



same hp capacity
in smaller "package"





P/W TRANSPORTATION MEMOS

DETERMINATION IN DIXIE: Southern rail lines are currently mapping broad programs, holding shipper-carrier meetings, and even purchasing new equipment in their determined effort to get in step with the gigantic strides piggyback operations are making on railroads in other sections of the country.

Most Southern railroads will be the first to admit they have been slow in jumping on the piggyback bandwagon. Two big reasons are sparking their all-out drive to catch up with the rest of the nation's rail lines: (1) customer demand, and (2) the eye-popping statistics pertaining to the cargo volume attracted by the piggyback movement.

For example, during the last week of August this year, nationwide piggyback movements increased by 2,213 cars or 24.7% over the same period last year, and 4,928 cars or 84.3% over 1958. Total movements through August were up 93,429 cars

or 35.1% over 1959 and 191,410 cars or 114% over 1958.

DISPUTED RAIL CHANGE: Opposition is developing, particularly from shippers of liquefied petroleum gas, to the railroads' proposed revisions of "storage in transit" charges. This is expected to add to the cost of shipping a number of products.

Warren Petroleum Corp., Tulsa, Okla., for example, claims the proposed new scale of service charges would increase its in-transit costs 33% in the Southeast and 25% in the Southwest. Warren and other shippers of liquefied petroleum gas intend to protest the rail changes vigorously.

A STUDY OF STRENGTH: At its annual convention in Lake Tahoe, Calif., recently, the Pacific Coast Assn. of Port Authorities formed a committee to study transcontinental railroad freight

rates with a view toward strengthening the position of Pacific Coast ports for cargo moving to and from the Orient.

K. R. Sadler, traffic manager of the L. A. Harbor Dept. was appointed chairman of the committee.

NEW RATE STRUCTURE: The Eastern Central Motor Carriers Assn., in an attempt to abandon the rail rate structure it now uses, has undertaken a general revision of class rates. The group hopes to complete a study on which to base new tariffs by Sept. 30, 1961. The result is expected to be higher shipper costs.

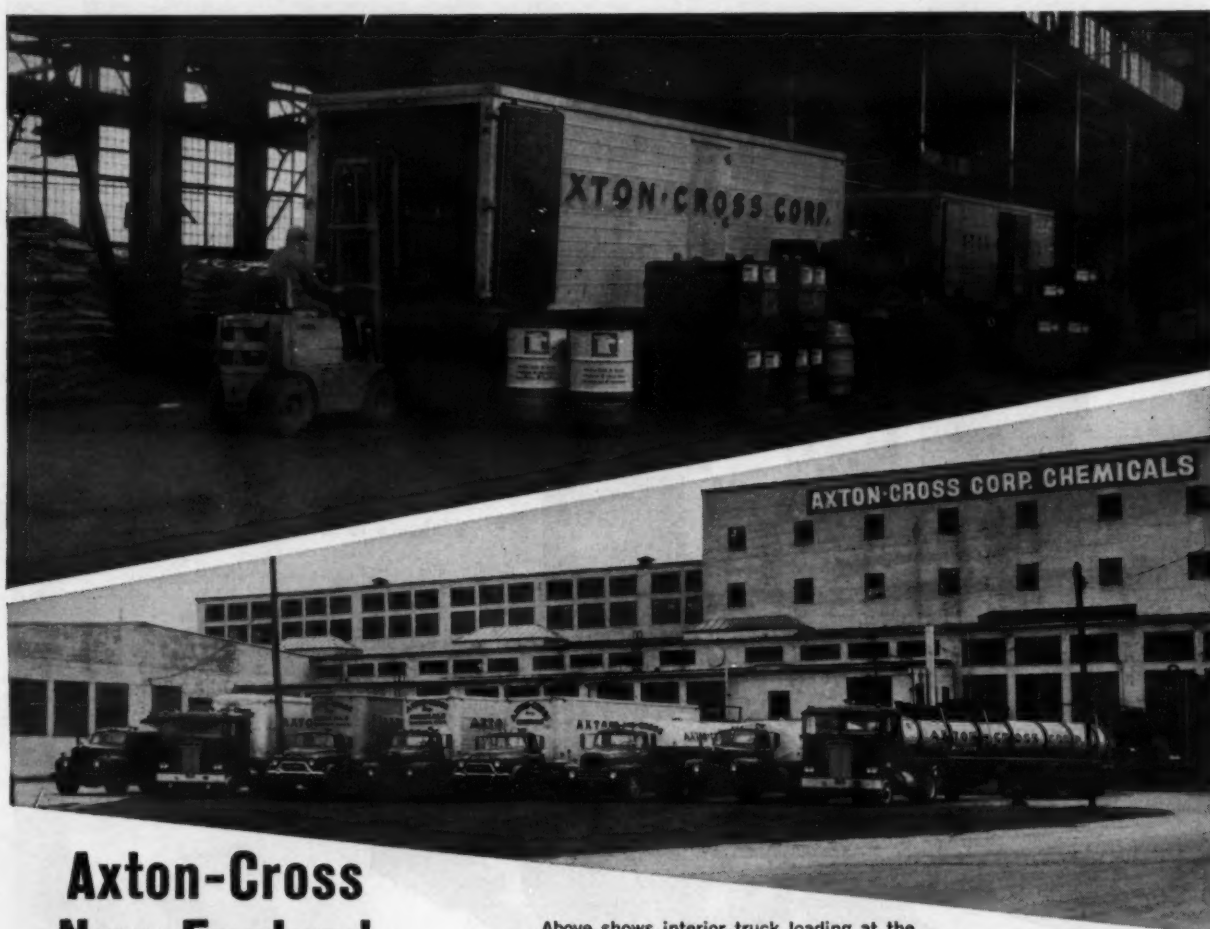
Meanwhile, the Middle Atlantic Trucking Conference is seeking an immediate increase of 20% over present minimum charges.

FLEET MAINTENANCE SHOW: The Private Fleet Truck Council of America will sponsor the 1960 Fleet Maintenance Exposition at New York's Coliseum Dec. 5-8. Workshop sessions, panel discussions, and other program features have been carefully arranged in order to permit fleet operators, buyers, and top management time to meet engineers and designers of manufacturers and to evaluate the products displayed at exhibit booths.

NEW FACILITY: Public ore unloading facilities went into operation in New Orleans last week. They are located on the Mississippi River-Gulf outlet east of the Industrial Canal.

The bulk handling facility is situated at the water's edge in front of the United States Gypsum Co. plant and is designed to unload ore from ship to storage or from ship to barge. U. S. Gypsum will be a major user.

WHISTLESTOPS: Railway Express closed its Havana office Sept. 15 following notice to the Cuban Ministry of Labor it was terminating services between Cuba and the U. S. . . . Trans-Bay Motor Express Co., Emeryville, Calif. has extended its overnight express service to include Fresno, Rossville, Santa Rosa, Salinas, and other intermediate points from San Francisco to Oakland . . . Pacific Far East Line has increased its shipping service between San Francisco and Hong Kong with an additional stop at S. F. by the SS Japan Bear. This will lengthen shipping time to Manila by three days . . . U.S.A.C. Transport, Detroit, has expanded installations at Mobile, Ala. to handle all the territory formerly served by terminal facilities at Macon, Ga.



Axton-Cross New England chemical service

Above shows interior truck loading at the Framingham, Mass., plant. This is one of the largest chemical warehouses in New England.

Outside, some of the fleet in the morning lineup for customer deliveries.

"Tomorrow? Easy! If you're in a jam we'll get it there today." That is the standard Axton-Cross response to an order for chemicals.

To make those promises good they have some 50 vehicles, from tractor trailers to station wagons delivering from 3 tank farms and 4 warehouses. Ample stocks of their wide line of chemicals guard against shortages.

Axton-Cross gives service as well as supply. Twelve technically trained representatives cover the territory and are available for consultation. The

laboratory at Shelton, Conn., works on customers' problems when this kind of help is needed.

Customers of Axton-Cross can appreciate the benefits from the prompt service rendered by a good chemical distributor. If you are interested in such service on Blockson and Mathieson chemicals, we will be glad to suggest distributors in your area.

Olin Mathieson

Chemicals Division • Baltimore 3, Md.



Ammonia • Bicarbonate of Soda • Carbon Dioxide • Caustic Soda • Chlorine • Formaldehyde • Hydrazine and Derivatives • Hypochlorite Products
Methanol • Muriatic Acid • Nitrate of Soda • Nitric Acid • Soda Ash • Sodium Chlorite Products • Sodium Methylete • Sulfur (Processed)
Sulfuric Acid • Urea • Ethylene Oxide • Ethylene Glycols • Polyethylene Glycols • Ethanolamines • Glycol Ethers • Surfactants • Ethylene Dichloride



Trisodium Phosphate • Trisodium Phosphate Chlorinated • Sodium Tripolyphosphate • Tetrasodium Pyrophosphate • Sodium Hexametaphosphate
Monosodium Phosphate • Disodium Phosphate • Sodium Acid Pyrophosphate • Tetrapotassium Pyrophosphate • Sulfuric Acid • Hydrofluoric Acid
Sodium Silicofluoride • Sodium Fluoride • Teax® 120 Surfactant

7905

ICC Commissioner Asks Shippers To Stop Illegal Traffic

Washington — Unregulated transportation threatens to undermine the nation's common carriage transportation system—and it's up to the shipper to prevent it. That, in essence, is what Interstate Commerce Commissioner Laurence K. Walrath told the recent annual meeting of the National Petroleum Association at Atlantic City.

Unregulated carriers, encompassing private truck fleets, exempted co-ops, and various types of illegal freight hauling maneuvers, handled an estimated 70% of all ton miles of freight moved in intercity traffic in 1959. And, they will handle a large chunk of the business this year, Walrath predicted.

This situation, the ICC commissioner said, is forcing the common carriers—rail, water and truck—into destructive competition among themselves for the remaining freight tonnage.

Rate Hikes Intensify Problem

Forcing the situation even more, Walrath says, is the move by the common carriers to make up for loss of freight revenue by increasing rates on the goods they haul. This forces even more tonnage to private carriage, further aggravating the problem.

The Walrath solution: greater cooperation between both the shipper and the common carriers. Shippers, the ICC commissioner said, should only turn to setting up their own truck fleets when common carriers cannot render them the service they need.

Also, common carriers must revise their operations to the point where shipper's won't abandon that mode of transportation. There are some key steps that can be taken to accomplish this, Walrath pointed out:

First, shippers should be given more freedom in routing their goods. This can only be accomplished, however, when rails, trucks, and water carriers—join together in fair and cooperative rate-making agreements and abandon today's struggle to siphon freight away from each other through complex sets of rate structures.

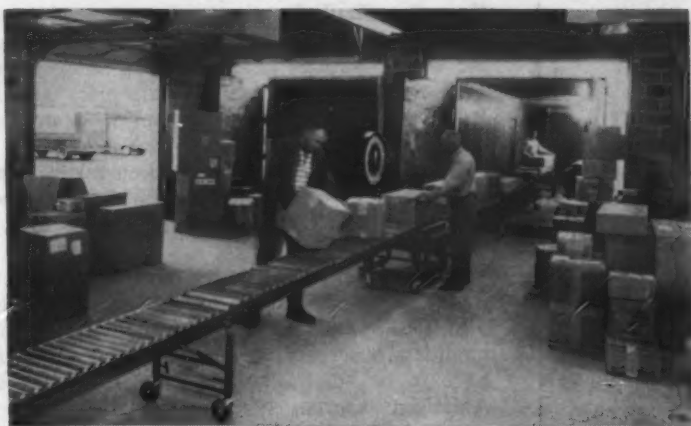
Secondly, Walrath called for both shippers and carriers to agree on standard containers that can be interchanged freely between carriers.

Check Present Laws

Existing laws that exempt many commodities—primarily agricultural and bulk goods—from ICC regulation should be re-examined with the view to bringing much of this freight under regulation and thus channel it to the common carriers.

Finally, the ICC commissioner, made it clear that the Interstate Commerce Commission should step up its efforts to sift out and punish both shippers and carriers that are illegally shipping goods in violation of ICC regulations.

Ambitious as the program seems, Walrath told the Petroleum Association, it can be accomplished. But the key to achievement, he stressed, is for shippers to decide where their interests lie: for a strong common carriage system or against it.



NEW TERMINAL: Flexi-Van rail-highway trailers (above) help speed shipping, cargo handling at first Railway Express key-point terminal.

REA Opens 'Key-Point' Terminal

Kalamazoo, Mich.—Railway Express Agency has completed its first terminal under the company's new nation-wide "key-point terminal plan."

The \$125,000 facility, expected to double the REA's previous cargo handling capacity here, will serve an enlarged 100-mile area around Kalamazoo—including Battle Creek, whose terminal will be consolidated with the one here.

Other points served by the new terminal are Allegan, Constantine, Galesburg, Lawton, Martin, Mattawan, Otsego, Plainwell,

Portage Center, Schoolcraft, Three Rivers, Vicksburg, and Wayland.

The new facility—a single-level brick, steel, and concrete structure, 115-ft. long by 90-ft. wide—is expected to process more than 40,000 individual pieces of rail and air express cargo each month.

It is part of Railway Express' rebuilding program aimed at establishing a nationwide network of express terminals, in order to speed processing and handling of rail and air express shipments to any point in the U. S.



ROYAL BLUE—we put a lot of work into it—You get a lot of work out of it.

ROEBLING ROYAL BLUE WIRE ROPE This is rather a long view of a wire rope that's a real work horse. Time and tests have taught us at Roebling that wire rope users *want* the long view. What else, they say, are they spending their money for?

Here, you're looking through a length of Royal Blue whose core has been removed to show the uniformity and symmetry of the rope structure. You see how concerned we are with internal security.

This is one of the reasons why Royal Blue lives up to the day-to-day demands made upon it. High stresses and unavoidable overloads, abrasion, fatigue, impact, crushing, sheave pressures and abusive drum-winding, to name the major ones.

We have to know that the rope we build will do what we sell it to do. Numerous quality-control measures help us—as they do you—to take the long view of Royal Blue. For details about long-lasting Roebling Royal Blue, ask your wire rope distributor or write Roebling's Wire Rope Division, Trenton 2, New Jersey.

ROEBLING

Branch Offices in Principal Cities • John A. Roebling's Sons Division • The Colorado Fuel and Iron Corporation

Foreign Perspective

OCT. 3-9

Bagdad—Much as they dislike it now, American P.A.'s soon may find themselves selecting foreign supplies from a list of identical bidders.

The trend away from competitive bidding and toward world-wide price fixing agreements was stressed once more at the recent conference here of Middle East oil producing countries and Venezuela, who joined in setting up the world's newest international cartel, the Organization of Petroleum Exporting Countries.

Long-range goal of the new group is to control world oil output and prevent market price fluctuations, such as the 4¢ to 10¢/barrel dip suffered by the industry last month.

If OPEC is successful in controlling world prices, it may mean that the United States government will have to take a new look at its antitrust laws. Under current legislation U. S. oil producers would not be allowed to "fix" their prices according to these world agreements.

Oil is not the only industry that hopped on the price-fixing bandwagon. Tin has for many years been under the international control of the Tin

Council. Similarly, zinc and lead producers around the world fix their prices and control their production according to the recommendations of the United Nations Lead and Zinc Study Group.

In most cases, of course, these price agreements, while annoying to the P.A., who is used to a system of competitive bidding, help to protect nations that are dependent on one industry.

Indonesia, for example, has been taking a beating from fluctuating world coffee prices. President Sukarno's government is now trying to organize a conference of coffee producing nations to set up a Coffee Council similar to the Tin Council.

Even European textile manufacturers, hard hit by cheap goods from low-wage Japanese mills, are asking for some sort of world price controls.

If U. S. wants to play the international trading game in all these commodities, observers at the oil conference here, at least, insist, there will have to be some changes made—to allow some price fixing of selected American exports.

Helsinki—Finland is driving hard to boost its exports to the Free World—now that Mr. K. has given his okay for Finland to join the European Free Trade Assn.

In addition to its traditional forestry products, Finland also is expanding in a wide range of other industries. Finnish equipment and whole plants are appearing in Europe, Turkey, Brazil, the U. S., and other parts of the world.

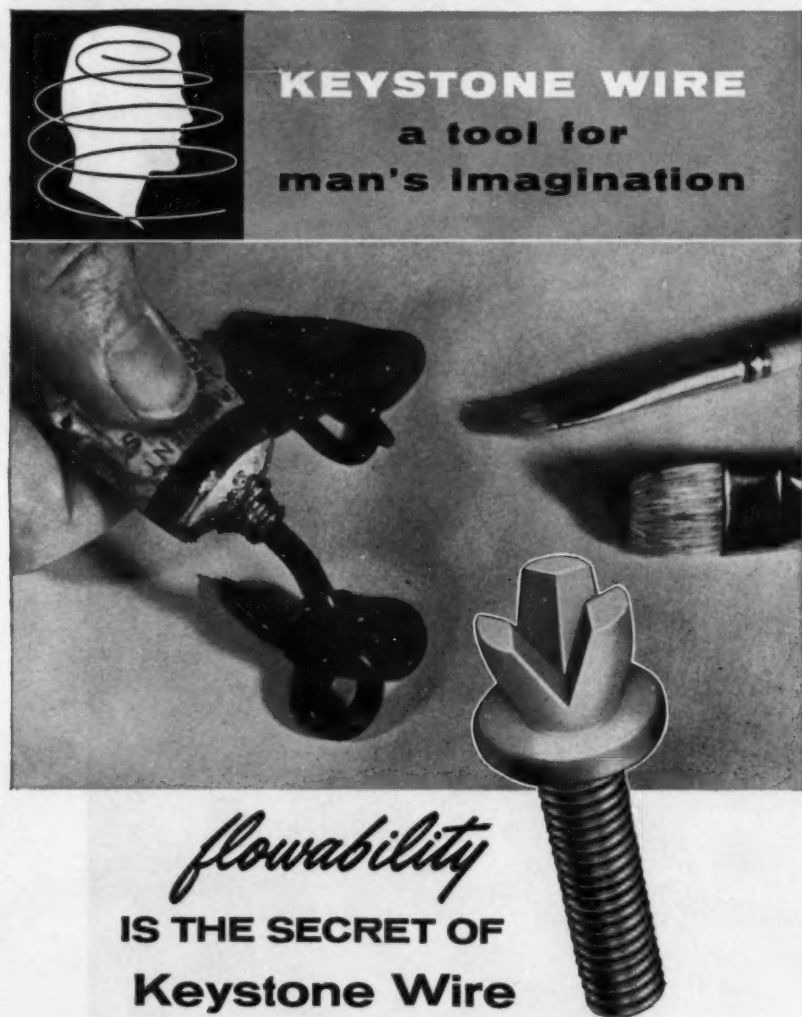
One of the biggest metalworking concerns, Valmet Oy., has established a Brazilian manufacturing subsidiary, which expects to turn out 3,000 tractors/year by 1962.

Prominent in the export drive is Metex, a 39-member group of metalworking firms. Metex is a flexible organization that will do anything—from making an initial foreign contact for a member firm, or handling the complete export set-up for a line of equipment, to designing complete plants using predominantly Finnish materials, of course.

NEW PRODUCTS—MAN-MADE FIBER, called "Moynel," developed by Courtaulds Ltd., of England, will be introduced in Canada by Courtaulds (Canada) Ltd. new cellulose fiber is economical and, in fabrics, can be mercerized and made crease resistant . . . **LOW-COST INSTRUMENT** measures relative humidity accurately from 0% to more than 90%. Developed by Dr. R. G. Wylie at CSIRO Division of Physics, University of Sydney, Australia. Commercial manufacture now being arranged in Sydney . . . **ELECTRONIC BAR**, designed by Institute for Automation and Allgemeine Elektrizitate Gesellschaft, in Hanover, Germany, mixes and shakes beverages with help of electronic computer, then pours them out in uniform quantities.

FOREIGN FARES—SPOT COPPER continued its slide on the London Metal Exchange opening last week with a dip of £4½ below the previous week to £232¼ . . . **COPPER FUTURES** followed the trend slipping from £236¼ to £233¼ . . . **LEAD** also sagged from £70 to £68¾ . . . **ZINC** showed some independence of a rather dull market by holding steady at £86¼ . . . **SPOT TIN** also held steady at £805, while **TIN FUTURES** dropped £1 to £802.

European **STEEL MILLS** are quoting two-to-four month delivery times on hot and cold rolled sheet, selling at \$150/metric tons and \$168 to \$170/metric ton respectively. The same delivery lag holds on medium (½ in.) plates, now selling at \$113 to \$115/metric ton. Wire rods (5.5 mm.) at \$112/metric ton, strip at \$111/metric ton, and heavy plates (¾ in. and over) at \$102 to \$103/metric ton is available on an immediate delivery basis.



KEYSTONE WIRE
a tool for
man's Imagination

flowability
**IS THE SECRET OF
Keystone Wire**

It is amazing what you can do with imagination and Keystone Wire. You can bend wire, twist it, cold form it into incredibly complicated shapes—and under certain conditions make it flow like paint from the artist's tube. This is what happens when the terminal block stud shown here is cold headed in a double blow by Pioneer Screw & Nut Co., Melrose Park, Illinois.

Although normally considered a difficult cold heading problem, Keystone Wire flowability makes it possible. This flowability characteristic also makes possible the forming of many other intricate parts from steel wire without machining. This saving results in the elimination of waste, plus more efficient production.

Perhaps one of your parts, now being made by a costlier, slower means, can be shaped from steel wire meeting your exacting requirements. Send us your blue prints and specifications and we shall be pleased to give you our recommendations. No obligation.



Keystone Steel & Wire Company, Peoria, Illinois

KEYSTONE

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...end your
delivery problems!**

Why? Because D-C takes the entire responsibility for delivering your order for parts, materials, or merchandise *on time and in good condition*. Only D-C can offer one-carrier responsibility coast-to-coast because only D-C goes direct coast-to-coast! One-carrier handling...one-carrier control...non-stop, straight-through service all the way on D-C equipment...cuts 20% off running time...assures you on-time delivery *every time!*

**Specify the Dependable Carrier...
D-C...coast-to-coast choice for
coast-to-coast service!**

D-C DENVER CHICAGO TRUCKING CO., INC.
the ONLY direct coast-to-coast carrier!

Foreign News in Brief

Goodrich to Build

Kitchener, Ont.—B. F. Goodrich Canada, Ltd., has announced plans to build a new tire plant here at a reported cost of \$7-million. The new plant, construction of which will get under way next spring, is scheduled for completion by late 1961.

Machine Tool Research

London—The British machine tool industry will set up its own research group to be sponsored by the Machine Tool Trades Association.

Under arrangements announced by the new association, the group will "administer funds contributed by the industry for the purpose of coordinating, accelerating, and initiating research projects for the benefit of machine tool design and production."

Canadian Industries Expands

Montreal—Canadian Industries, Ltd., local affiliate of Britain's Imperial Chemical Industries will spend \$3½-million to enlarge its central research laboratory in McMasterville, a suburb of Montreal.

The expansion is expected to triple the company's laboratory space. Work, scheduled to start next spring, should be completed by mid-1962.

Aromatics Extraction Plant

Montreal—British-American Oil Co., Canadian affiliate of Gulf Oil Co., will build a \$2½-million aromatics extraction plant at its refinery here. Construction is expected to start immediately with completion date set for next spring.

New Process Developed For Recovery of Sulphur

Calgary, Ont.—Maloney-Crawford Tank & Service Co. Ltd. has reached an agreement with Western Sulphur Recovery Ltd. to develop and market a new low-cost gas purification and sulphur recovery process.

The process involves absorption with synthetic zeolites and a special regeneration technique to produce elemental sulphur.

"Laboratory tests," said George Cheatham, Maloney-Crawford president, "indicate the unit will simultaneously dehydrate, sweeten, and improve the heating value of sour natural gases and produce sulphur at low cost."

Cheatham said his company is designing a pilot plant for the new process. Western Gas Technologists, Ltd., will provide technical assistance in the new plant, he said.

Cheatham refused to disclose any details of the new process, but said capital investment and operating cost would be significantly below those of conventional dehydration, sweetening, and sulphur recovery processes.

"We believe this is the answer to some of our gas problems which will be created in conjunction with recovery of more than 4,000 long tons of sulphur per day in the near future," he said.

Brazil Seeks Subsidies

Rio de Janeiro—Brazil's Finance Minister, Sebastian Paos de Almeida, announced he will urge Congress to pass a bill subsidizing his country's exports.

Lack of long-term financing facilities has retarded Brazil's efforts to push its exports of manufacturing and agricultural products. Under the new law, he said, and export bank will be set up and will function within the newly-created Industry and Commerce Ministry.

Nissan Suspends Exports

Tokyo—Nissan Motor Co. has suspended exports of Datsun Bluebird cars to the U.S. until reorganization of the firm's American distribution system can be worked out. The reorganization will include setting up a distributing company in Los Angeles.

At the same time, Toyota Motor Co. said it expects to begin shipping Tiara cars to the U.S. beginning at the end of October at a rate of 300 to 400/month. Attempts to sell its Toyopet

Crown in America last March reached a dead end, when total Japanese car exports to the U.S. over the first five months slumped to only 573 cars, compared to 1,944 for the same period of 1959.

ENI Builds Plant

Milan—"ENI," Italy's state-owned oil and gas monopoly, has announced plans to build a plant for the manufacture of measuring and control equipment in Bari in eastern Italy.

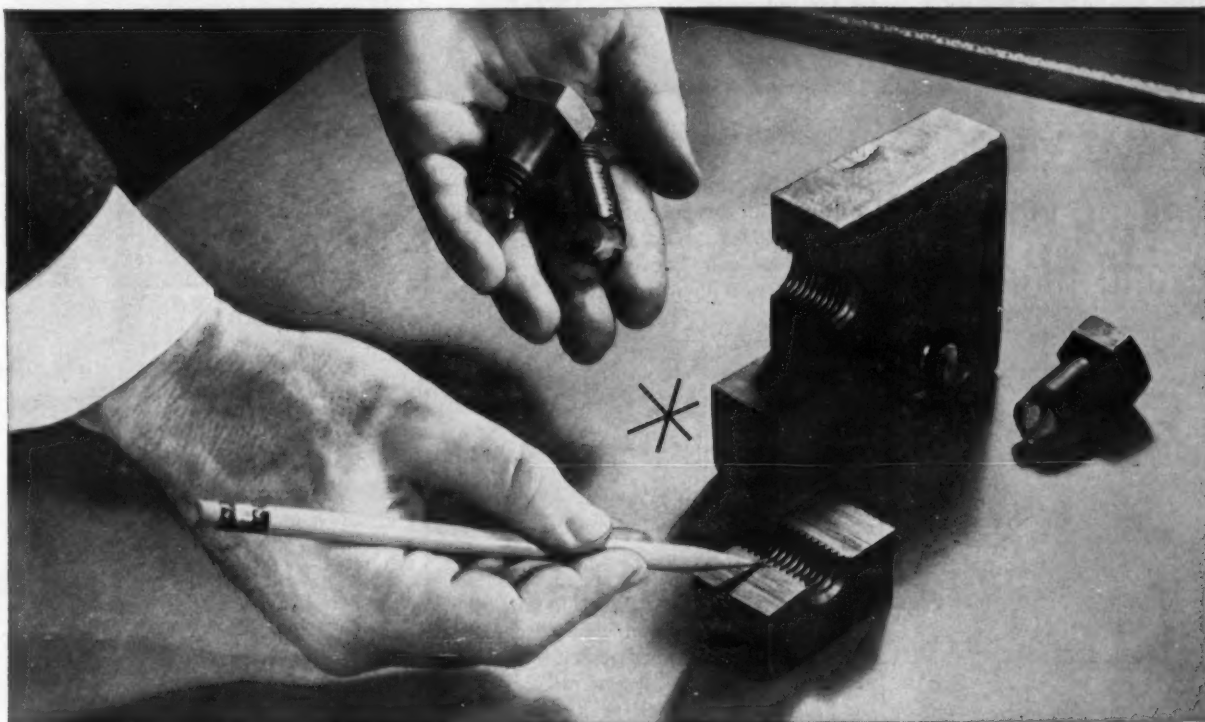
The new plant, whose estimated cost will range between \$6-million and \$8-million, will be this

country's first to produce regulators, indicators, electric transmitters, and timers.

Electric Reduction Expands

Port Maitland, Ont.—Electric Reduction Co. of Canada, Ltd. will put up a \$12-million phosphate production plant here.

The new facility, which will produce a number of other fertilizer ingredients, is expected to have sufficient capacity to supply the whole Canadian market plus about 5% of the U.S. market. In International Minerals and Chemical Corp., of Skokie, Ill., has been named its U. S. distributor.



Showed way to save \$7800

RB&W fastener survey of refrigeration unit suggested that hex screws be substituted for studs ... and castings be tapped with less costly clearance fit.

When there are no special design requirements or space clearance conditions, using studs of 1-inch diameter and smaller often penalizes the user needlessly. First, in direct costs, since the more economical hex screws will do the job. Second, in production costs, since studs require holes tapped with an expensive interference thread fit.

The RB&W Man pointed this out when his survey revealed over 250

stud fastenings per refrigeration unit. For this application, 250 hex screws cost \$8.45 ... for a saving of better than \$22 over the studs and nuts. Annually this would total to \$7800 ... clear profit. And on top of this, reduced tapping costs, too.

Want to get the most from your fastener dollars? Ask for an RB&W man to make a survey. Contact Russell, Burdall & Ward Bolt and Nut Company, Port Chester, N. Y.

* Specifying studs for fear that hex screws might damage castings during disassemblies is based on a groundless fear. Hex screws in threaded holes with clearance fit can be reused repeatedly without damaging the casting. In the test casting shown above, the hex screws were first tightened and removed 50 times—then torqued to breaking point. Cutaway section showed casting threads were still perfect, with no sign of stripping.



Plants at: Port Chester, N. Y.; Coraopolis, Pa.; Rock Falls, Ill.; Los Angeles, Calif. Additional sales offices at: Ardmore (Phila.), Pa.; Pittsburgh; Detroit; Chicago; Dallas; San Francisco. Sales agents at: Cleveland, Milwaukee; New Orleans; Denver, Fargo. Distributors from coast to coast.

The LAW and YOU

BY THE NUMBERS

If you make an offer to buy and set an exclusive method of acceptance by the seller, his acceptance of the offer in a different manner does not bind you. However, if your offer merely suggests a permitted method of acceptance, other methods are not precluded and a contract is in effect.

Take this case: The buyer's purchase order for machinery to be installed by seller had attached to it an indemnity provision making the seller liable for the negligent acts of both its own and the buyer's employees. The order provided the agreement was not binding until accepted. Moreover, the acceptance had to be executed on the acknowledgement copy of the order and returned to the buyer.

Seller did not sign and return the acknowledgment, but started work with the buyer's consent. During the installation, a seller's employee was injured because of the negligence of buyer's employees. The seller claimed that it did not have to indemnify buyer because the indemnification provision was not in effect—seller had not accepted buyer's offer in the manner prescribed.

The court held that the buyer's offer called for only a suggested method of acceptance. The buyer's consent to part performance was sufficient to complete the contract and make seller liable under the indemnity provision. (Ford Motor Company v. Allied Steel and Conveyors, Inc., 277 F. 2d 907.)

HASTY REFUSALS

A buyer is entitled to refuse seller's delivery of goods earlier than contracted for on the sole ground of premature delivery. But this rule has its qualifications.

Example: A seller delivered machine parts 10 days before the agreed delivery date, but not having room in his warehouse, the buyer refused delivery. Ten days later, on the agreed delivery date, the vendor attempted to deliver the machine parts again; buyer again refused to accept them.

The court said delivery of goods to the buyer before the contracted time of delivery entitled buyer to refuse the parts on the sole ground of premature delivery. But buyer was not justified in refusing the goods when they were again tendered at the time contracted for. On the other hand, seller had the burden of showing that the goods complied with the contract of sale in all other respects. In this case, the seller showed that the goods so tendered complied with the contract and won in court.

PAYING FOR EXTRAS

Sometimes the law imposes an obligation to pay for services performed without regard to the intention or assent of the parties. This is dictated by reason of fairness and justice, and the amount of the payment is the reasonable value of the services rendered.

A recent California case illustrates the principle: A buyer acquired a new bus for the purpose of having it converted into a "land yacht." In a letter to the contractor who was to do the work, he outlined what was to be done and also expressed a willingness to pay certain amounts per hour for different types of labor, plus a charge of 10% on "all outside labor and material." The total was not to exceed \$25,000.

The contractor agreed to the terms and started making a luxury motor home out of the bus. But after the buyer paid \$31,000, he called a halt on further payments.

The contractor sued for more money. The court held the "contract" to be too indefinite to award any money to Bohman under it, but it awarded Bohman a further sum of \$14,184 on the quantum meruit theory. Although the "contract" was indefinite, the court felt that it was only fair and just that the contractor be paid the reasonable value of his services. (Bohman v. Berg, 5 Cal. Repr. 326.)

BY INVITATION ONLY

When you advertise for bids, you are not making an offer. The law says you are

only inviting others to make offers to you. The distinction is important.

After advertising for bids, you do not have to accept the lowest bid. This is so even though your advertisement does not reserve the right to reject any and all bids. Legally, those submitting bids are the offerors. Thus, when you accept a bid you bind the bidder to a contract. And you don't have to do this unless you want to.

But watch out for a poorly worded advertisement which may bind you to accept the lowest bid.

Example: Watkins advertised for bids to paint his plant. His advertisement stated that "the lowest bid under \$10,000 will get the contract." This made the advertisement more than just an invitation to make offers which could be rejected at Watkins' pleasure. It was an offer on Watkins' part to give the contract to the

lowest bidder under \$10,000, and the law will require him to accept the lowest bid under that amount. Eliminate the words "will get the contract" and the advertisement is merely an invitation to others to make bids which Watkins has the right to reject.

IS IT NEW?

Don't assume that the article you are buying is new and unused. The seller does not always have to tell you, provided he has done nothing to induce that belief.

However, where seller knows that buyer believes article is new and unused, seller's failure to disclose that the article is used constitutes fraud. A buyer can rescind the sale and recover the purchase price. Moreover, circumstances of a sale sometimes create an express warranty that the article is new.

(The above material was prepared by Sydney Prerau of the J. K. Lasser Tax Institute for PURCHASING WEEK. Reader inquiries on general tax and legal aspects of purchasing will be discussed here in accordance with space limitations and applicability.)

"This chart survey saved us work, time and money!"



"I used to order recording charts as frequently as we needed them. But not now. This simple survey helped me place a single long-term order for GC charts with automatic deliveries spaced to our requirements."

You, too, can stop fussing with lots of little orders, for lots of different recording charts, from lots of different suppliers. Send for a GC Chart Survey Form. Merely list chart numbers and the quantity you use. Return your completed Survey to GC and they will send you free chart samples for your engineers to check and a firm price for filling all your chart requirements. If it looks good you can then place one order covering several months or even a full year. GC will make automatic deliveries to meet your needs.

In addition to saving time and clerical work, GC charts cost less because they are produced in such large quantities so efficiently. And their quality is guaranteed by GC, the world's largest recording chart specialists.

Start saving—and get quality and service. Write today for your chart survey forms.



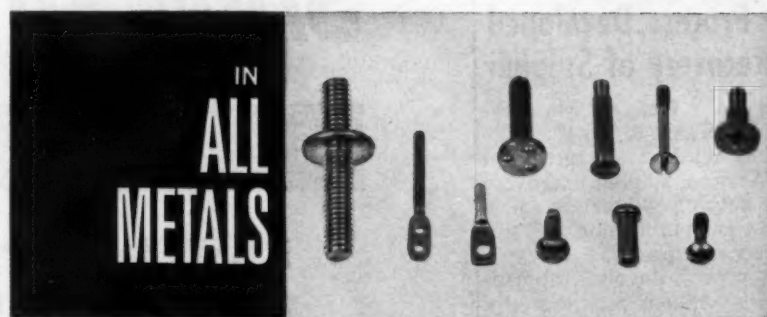
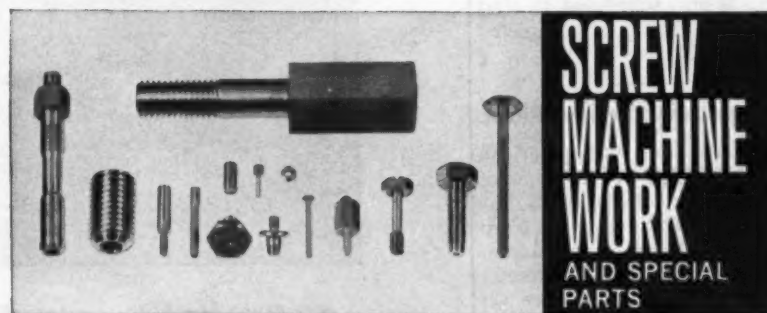
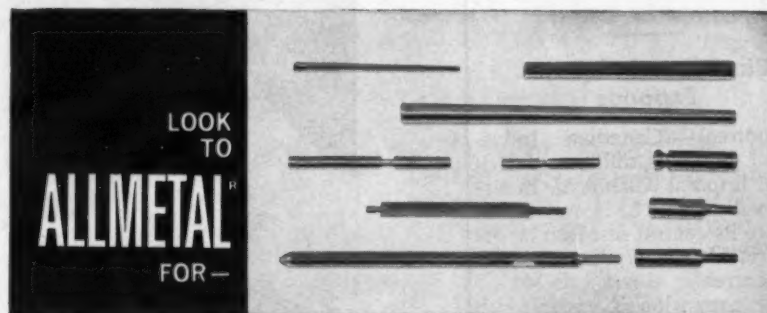
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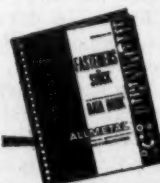
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Buffalo 10, New York



You can look to Allmetal for fine screw machine work in all metals...plus cold heading and hot forging. Complete secondary operations. Prompt production on long or short runs. Intricate shapes, precision tolerances, large, small miniature sizes.

- 30 YEARS OF KNOW-HOW • RIGID QUALITY CONTROL
- SINGLE AND MULTIPLE SPINDLE AUTOMATICS
- BATTERIES OF COLD-HEADERS • TOOL ROOM
- HOT FORGING EQUIPMENT • LARGE MODERN PLANT



For standard stainless steel fasteners, you can depend on Allmetal to provide immediate shipment from "the world's largest stock of stainless fasteners."

REQUEST

132-page catalog #60 (on your letterhead). Packed with helpful fastener data plus stock list.

MANUFACTURERS OF STAINLESS STEEL FASTENERS SINCE 1929

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821 STEWART AVENUE, GARDEN CITY, NEW YORK

MIDWEST SALES OFFICE
6424 West Belmont Ave., Chicago 34, Ill.

WEST COAST OFFICE & WAREHOUSE
5822 West Washington Blvd., Culver City, Calif.

Profitable Reading for P.A.'s . . .

New Books

Management By System, by Richard F. Nenschel. Published by McGraw-Hill Publishing Co., 330 W. 42nd St., New York 36, N. Y., 359 pages. Price: \$7.95.

This comprehensive book seeks to develop a top-management approach to the analysis and improvement of business procedures.

Besides showing how to eliminate the expense of outmoded routines and waste-motion clerical operations, this guide gives methods for improving customer service, tightening control of production and distribution operations, developing teamwork among the various departments, boosting executive effectiveness and more. It also outlines techniques for a procedures staff that will best enable it to achieve dynamic, workable management systems.

Merit Employment, by Paul Bullock. Published by Institute of Industrial Relations, 100 BAE Building, University of California, Los Angeles 24, Calif., 101 pages. Price: 75¢.

The theme of this book is the host of problems raised by racial and religious discrimination in employment. The author documents his treatment with a discussion of such topics as: the history and nature of discrimination, typical management experience with merit employment, management's role in a merit employment program. Merit employment refers to the hiring, promotion, and general treatment of workers in accordance with their individual job classifications.

From the Manufacturer

Commercial Bearings

Describes company's line of commercial bearings including standard stud, bore, flange, door rollers, nylon rimmed bearings, etc. Catalog No. 101 (16 pages). **General Bearing Co., Inc.**, 63 Roselle St., Mineola, N. Y.

Steel Products

Discusses 35 films on steel available from company on a loan basis including: "New World of Stainless Steel," "Metal Window Installations," "Care and Handling of Buyers." Films are all 16 millimeter and are from 12 to 45 min. in length. (33 pages). **Republic Steel Corp., Commercial Research Div.**, 1436 Republic Bldg., Cleveland 1, Ohio.

Hydraulic Products

Describes hydraulic equipment including power packages, servo valves and systems, pressure controls, hydraulic motors, variable speed drives, hydraulic cylinders and accessories, etc. Typical circuit diagrams are also given. Catalog 5001C (74 pages). **Vickers, Inc., Sperry Rand Corp.**, Detroit 32, Mich.

Strain Gages

Contains prices and technical specifications for over 350 strain gages plus accessories. Includes

SR-4 and photo-elastic Strainline gages, plus monofilament strain gages, and inserts. SR-4 Strain Gage Price List 4310-60 (28 pages). **Baldwin-Lima-Hamilton Corp., Electronics & Instrumentation Div.**, Waltham, Mass.

Machine Tools

Describes company's complete line of light-heavyweight machine tools and accessories—including drill presses, grinders, cut-off machines, belt and disk surfacers, etc. Gives information on appli-

cations, specifications, illustrations, etc. Catalog WT-50 Rev. 3 (52 pages). **Rockwell Mfg. Co., Walker-Turner Div.**, 400 N. Lexington Ave., Pittsburgh 8, Pa.

Ball Bearing Slides

Contains descriptions, dimensional information, and mounting patterns on Jonathan ball-bearing slide mechanism for electronic equipment cabinet mounting. (16 pages). **Jonathan Mfg. Co.**, 720 East Walnut Ave., Fullerton, Calif.

Electrical Connectors

Covers technical information, ratings, and outline dimensions on company's new single-conductor plugs and receptacles. Bulletin PR259-1 (12 pages). **Dept. SPR, Superior Electric Co.**, Bristol, Conn.

Pipe Connections

Describes company's line of pipe connections and accessories including Grayloc clamps, flanges, vessel nozzles, closures,

bleeder valves, etc. Also contains relative costs of 39 piping materials. Catalog 1960 (44 pages). **Grayloc Sales Div., Gray Tool Co.**, P. O. Box 2291, Houston 1.

Plastic Coatings

Gives information on company's metallic vinyl series of protective coatings for protecting wood, metal, fiberglass, and compounds for patching holes, cracks and rust-outs, etc. (4 pages). **Magna-Bond, Inc.**, 1718 South 6th St., Camden 4, N. J.

TWA THE SuperJet AIRLINE offers you two great cargo services!



Ship coast-to-coast and overseas on TWA Super Sky Merchant Fleet

Excellent service between New York, Chicago and California on TWA's all-cargo Super Sky Merchant flights. Early morning deliveries in Chicago and California. In New York ... direct connections with Super Sky Merchants to major trade centers of Europe. Also, daily service to Philadelphia, Pittsburgh, St. Louis, Indianapolis, Kansas City and San Francisco. For dependable, on-time service, specify TWA Super Sky Merchant Fleet!



TWA Jet Freight... across the U. S. and Overseas!

Speed your shipments at home or abroad with TWA Jets and giant TWA SuperJets! Immense cargo capacity...10,000 lbs. each! And only TWA offers Jet Freight service to European trading centers from major U.S. markets... San Francisco, Los Angeles, St. Louis, Chicago, and New York. TWA's Jet Fleet and Super Sky Merchant Fleet serve 70 U. S. cities, 23 world centers. And almost anything goes by TWA... often at less cost than by surface.

FASTEST COAST-TO-COAST

Call your freight forwarder or nearest TWA Air Freight office

TWA

THE SUPERJET AIRLINE*

Call your freight forwarder or nearest TWA Air Freight office

*TWA THE SUPERJET AIRLINE is a service mark owned exclusively by Trans World Airlines, Inc.

Steel Forges New

United States Steel Corp. has pulled out the stops in a hard-hitting campaign to promote wider use of steel by industrial designers.

The campaign's slogan: Steel is as "beautiful as a dove and strong as an ox."

Its aim: Increase sales of basic steel by plugging the end product.

The reason: "Big Steel" believes the industry has lost markets and failed to expand its horizons because it hasn't been doing a good selling job.

It's the biggest promotion effort ever undertaken by a steel producer.

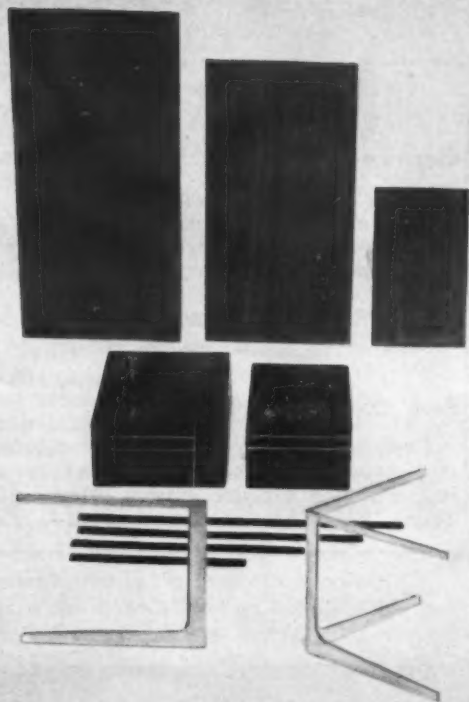
To implement the campaign, the company is going all out to spawn a host of new design concepts in the home furnishings field—as well as in equipment for retail stores, institutions, and public service. As part of the program, U. S. Steel commissioned the industrial firm of Peter Muller-Munk Associates to make a thorough study of the full capabilities of the metal.

Muller-

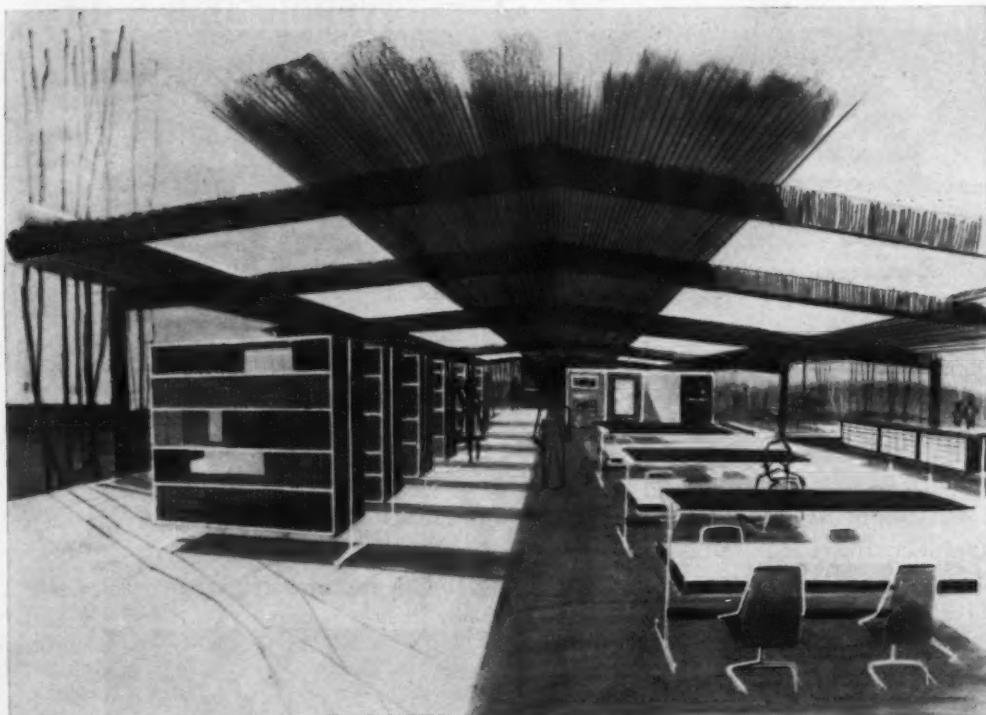
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BASIC KIT: Almost everything on this page started with these 11 pieces.



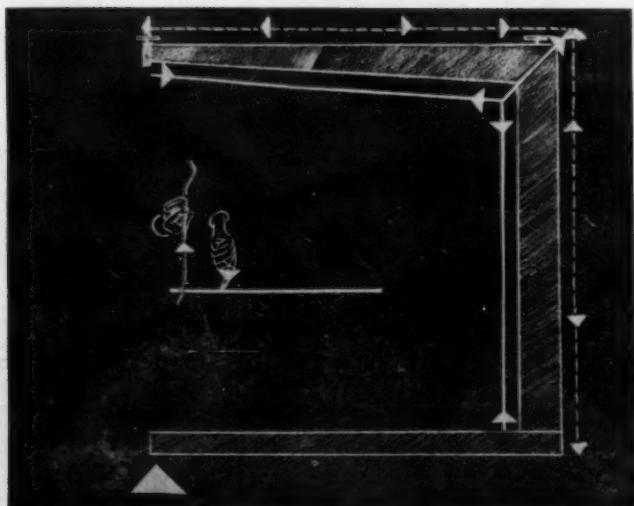
INSTITUTIONAL

Seating for schools, motels, bus stops, and stadiums is planned. Chairs are made of cantilevered steel. Foam units are hung from standing structures.

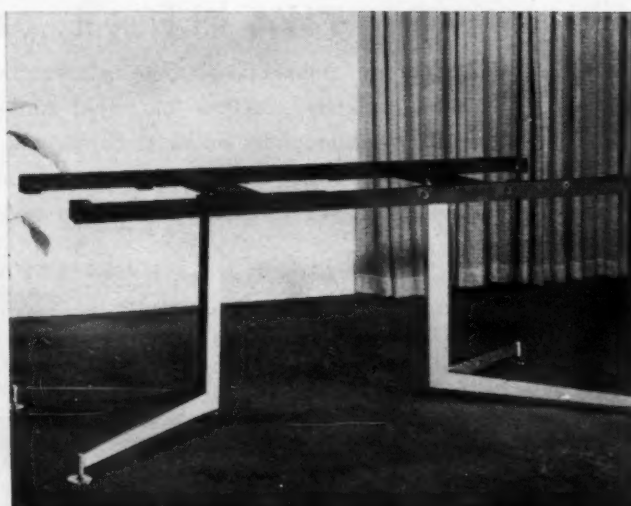


RETAIL

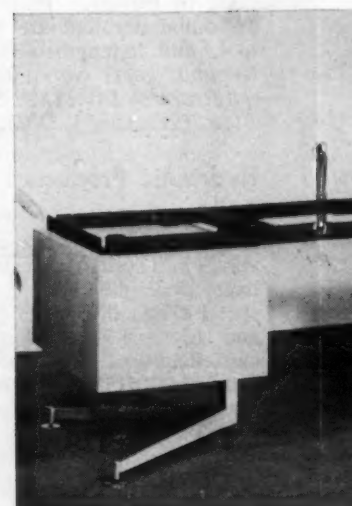
"V" legs and foam box units are combined to form display cabinets here. Other possibilities: restaurant tables and booths.



OFFICE FURNITURE, one area where U. S. Steel sees big potential, starts with this "C" leg.



PUT FRAME on two "C" legs to get free standing skeleton that utilizes steel's strength.



NEXT COME DRAWERS, boxes separated by urethane.

New Markets With Mammoth Promotional Drive

Muller-Munk decided to concentrate on new design concepts built around steel's inherent high strength. This strength could be used to best advantage, the designers concluded, in either tension, compression, or cantilever designs. Coupling this idea with some "blue-sky" design thinking, the firm came up with a variety of new potential uses.

The first result of the fresh approach to steel as a design material is a new line of office furniture. A modular group of component parts was developed which can be combined to form structurally strong, attractively styled furniture. The design was kept practical—easy to fabricate and long wearing.

U.S. Steel has no intention of getting into the furniture business—it's only interested in selling the sheets and bars that go into the final product. Several office furniture makers are reported to be interested in adopting the designs.

Three areas were explored in addition to office

equipment: institutional, retailing, and the home. Possible projects include:

- **Institutional**—seating, cabinets for record storage, and library study units.

- **Retailing**—restaurant table and bench combinations, counter seating, display cases, and modular self-contained interior equipment.

- **Home**—self-contained food preparation and serving units, patio and lawn furniture, toys, and a lightweight automobile trailer that can be taken apart and hung on the garage wall when not in use.

Basic structure in the new office group is a "C" leg, which can be used in a variety of ways to support any number of different loads. The leg combines tension, compression, and cantilever, and gets its strength from steel members which are welded together while under tension. This welding under stress gives the leg far more strength than a simple bar bent into a C shape.

Drawer units are hung directly on the frame—with

no additional support required. The drawer units are actually a "box within a box," with urethane foam filling the space between inside and outside. The exterior is vinyl-coated sheet steel. The result: an assembly that is 25% lighter than conventional plywood.

The desk top is a variation of the box construction used for the drawers. The oiled wood top is laminated to a steel box filled with the plastic foam—combining the quality appearance of wood with the non-warp characteristics of steel.

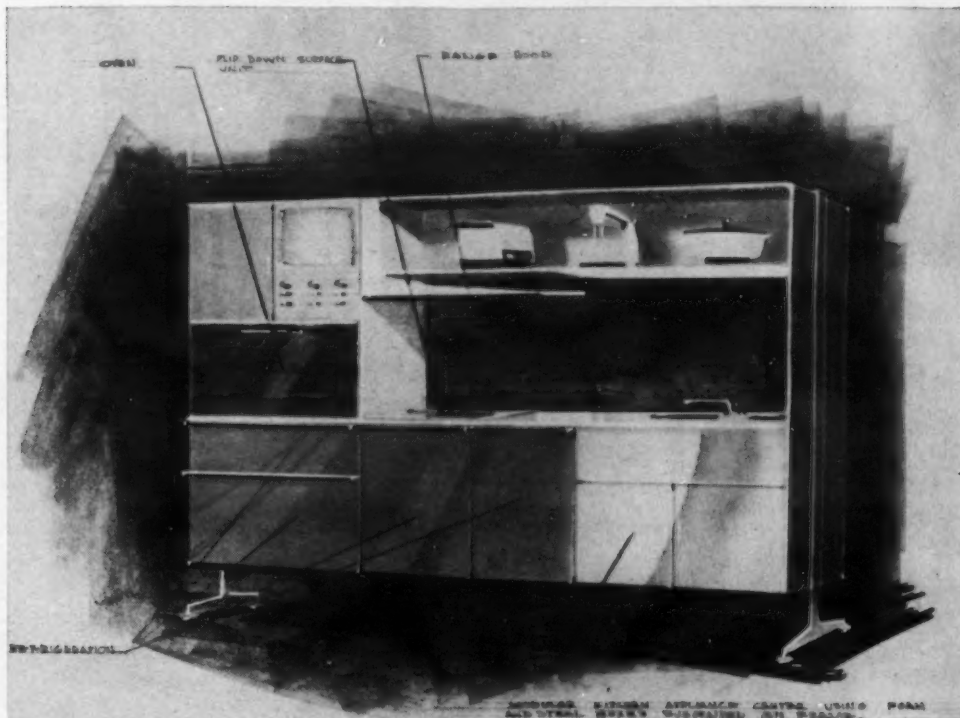
Twenty-eight different desks and three tables can be put together with the 11 basic components in the furniture line.

U.S. Steel has just opened a model office in New York City to show off the new furniture (and other design concepts). Manufacturers (and designers) of office furniture, retailing equipment, home furnishings, institutional, and public service equipment are being invited to the special showings.



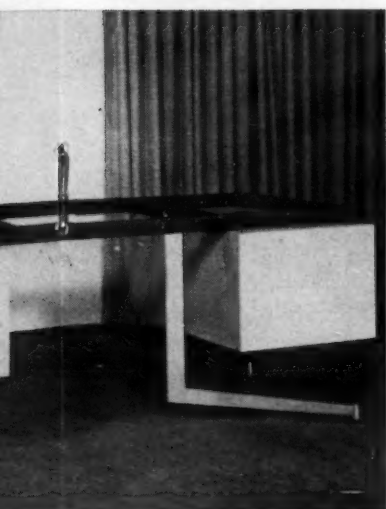
PLAYGROUND

Arches form toy that can be positioned six ways. Other uses: seesaws, swimming pool frames.



HOME

Cabinet contains all the necessary elements for a modern kitchen, needs only water, waste, and electrical connections. Bottom part of the unit has storage space for dishes, glassware, and linen



AWERS, which are two steel by urethane foam.



ATTACH TOP of wood laminated to steel; move in other equipment also built around steel.



ADD EXECUTIVE and you're in business in an office furnished almost entirely with steel.



NAPA 7th DISTRICT annual workshop brought local committee chairmen to Birmingham, Ala., for a Saturday session. P.A.'s divided into three groups headed by 7th district committee chairmen: J. K. Chambers, professional development; J. E. Clark, value analysis-standardization; and W. L. Beckham, public relations. On hand also were NAPA President Paisley Boney and national committee chairmen M. G. Edwards, national vice chairman, professional development; K. A. Cruise, VASCO; and M. B. Eubanks, Jr., public relations.

Buyer-Supplier Price Negotiations Get Airing Before Cincinnati P.A.'s

Cincinnati—The topic of price negotiations between buyer and supplier drew the attention of members attending the first Cincinnati Purchasing Agents Assn. meeting of the 1960-61 season.

Edwin H. Rabe, purchasing specialist for the local General Electric distribution assemblies plant, warned against putting a price on original orders.

"If you make a mistake," he said, "there are some vendors

who will take advantage of it."

Speaking at a pre-meeting workshop session on "What Services Do You Expect From Your Supplier," Rabe called for prompter notification by vendors, on price changes, catalogues kept more up to date, and faster notification of obsolescence dates.

Advance Warning

"I think if there are price changes coming up, we should be notified far enough in advance so that we can do something about it," he told the group.

Rabe, leading the discussion on the supplier-service question, urged that after an order is placed, suppliers send out separate order acknowledgments promptly.

"If the order is going to be delivered within a short time, I don't think it's necessary, but otherwise I like to get a postcard that shows our order number, their order number, and the date they expect to ship," he said.

Carbon Copies

Rabe dismissed the practice of returning a carbon copy of the purchaser's order as "not worth the expense."

"Statistics have proved," he said, "that 95% of that order paper is coming back with nothing but a clerk's name on it. You never know if the right person saw it or not."

P.A.'s also were advised "to keep awake on pricing."

"We had a quote on a job that was considerably cheaper than we had been getting," Rabe explained. "I wrote the supplier asking a guarantee that the price would not be raised unless that was a general increase in cost of labor or materials and they came back and said 'We made a mistake.'"

After the workshop, P.A.'s heard an address by Harry Stuhlreher, one of the famed Four Horsemen of Notre Dame, now an assistant to the vice president of United States Steel.

Buffalo Association Holds Forum on Steel Buying

Buffalo, N. Y.—Buffalo P.A.'s heard a forum discussion on steel industry purchasing problems at their September meeting.

Executives of three Buffalo area steel warehouse concerns served as forum panel members. Paul L. Wright, general manager, Buffalo Branch, Joseph T. Ryerson & Son, Inc., discussed "Sheets and Bars." Harvey O. Smith, district manager, Peter O. Frasse & Co., spoke on "Tubular Products." And Thomas E. O'Neal, president of Beals, McCarthy & Rogers, spoke on "Placing the Order."

Another speaker was Tom Campbell, editor-in-chief of Iron Age, who predicted that the steel industry would be on its way to new production highs by mid-1961.

The forum was under the direction of Robert G. Wahler, chairman of the Buffalo P.A. Assn.'s Commodity Committee.



Electric Trucks COST LESS TO OPERATE

Battery-powered electric trucks save in the three most important areas of cost breakdown: maintenance, fuel and depreciation. The electric truck effects economies in power and maintenance costs so substantial that their overall cost per ton-mile is less than half that of other types of trucks.

Add lower operating costs to a convincing list of other benefits—maneuverability, clean, quiet and safe operation, less maintenance—and you can easily see the main reason why users prefer battery-powered electric trucks for modern, efficient materials-handling jobs of all types.

Electric truck users generally agree on one other point, too—Gould Batteries for longer life. With the new Silconic Plate, Gould Batteries offer up to 25% longer life.

Join the list of users who prefer this ideal combination of electric trucks and Gould Batteries. For more information, write or call your local Gould representative. Ask for booklet "Why We Use Battery-Electric Industrial Trucks." Gould-National Batteries, Inc., Trenton 7, N. J. In Canada, write to Gould-National Batteries of Canada, Ltd., 1819 Yonge Street, Toronto, Ontario.

More Power to you from **GOULD**

Former President Of NAPA Speaks Before Erie Assn.

Erie, Pa.—Purchasing agents must continue to fight rising costs if U. S. industry is to prosper, a former NAPA president advised members of the Erie Purchasing Agents Assn.

E. F. Andrews, director of purchases, Allegheny Ludlum Steel Corp., Pittsburgh, said, "You can't do it in labor; we're lucky to hold it in line until the rest of the world catches up—materials are the only major area where costs can be reduced."

He called for improved techniques and warned, "If you are unaware of certain injurious laws before Congress and don't stymie them, you might as well go back to being a clerk. It takes clear, sound decisions; a value analysis of our programs, and keen competition to cut costs."

Andrews urged P.A.'s to "take your shirts off and get into shape; improve the laws of depreciation; fight for tax relief; recognize the labor laws for what they are; take a good, hard look at education and the basic liberal arts that really make the young man educated."

Many of today's colleges, he charged, are turning out graduates in practically anything the human mind might come up with, but not highly technical enough to meet the challenge of the future.

"We need to take a new, good hard look at our higher educational systems," Andrews warned. "The purchasing agent never had such an opportunity to come to the fore for the betterment of the national economy."

GE Analyst Urges P.A.'s To Devote More Time To Economic Forecasting

New York—Purchasing executives have a clear-cut responsibility to devote at least 25% of their working time to economic forecasting, a General Electric Co. economist declared here.

Speaking at the general forum of the New York Purchasing Agents Association, George P. Tateosian, GE consultant, economic analysis, said that proper use of forecasts "could save the public utilities about a half-billion dollars annually on transformers alone" by modifying the impact of cyclical buying.

Tateosian boiled down the number of forecasts to three basic types:

- **Short Term.** The seasonal forecast, good over a period of up to one year, Tateosian explained, is "quite predictable." Department stores, for example, he said, know they must increase their stocks every Christmas and cut down on inventories in mid-summer.

- **Long Term.** Good for periods of over five years, the long term, or "trend" forecast, is often based on good judgment of general business conditions.

- **Medium Term.** The GE economist pointed to the area of freight car loadings as an example of poor medium-term forecasting. These loadings alternately skyrocket and plummet from year to year because of cyclical buying.



SPEAKER AT ERIE: E. F. Andrews (2nd from left) talks with Kenneth Paterson, v.p.; J. F. Becker, pres., and William Thayer, past president.

Boney Decries Textile Import Policy

Birmingham, Ala., — The American textile industry's plight was laid squarely at the door of the Eisenhower Administration by Paisley Boney, J. P. Stevens Co., NAPA president.

Speaking before the Purchasing Agents Assn. of Alabama, Boney blasted the Administration for its attitude toward the textile industry. He declared the federal government has taken the position that the nation's textile industry, with sales of \$30-billion a year, is expendable.

"If the federal government takes that position on the textile

industry, it certainly is time to wonder who's next—the steel industry, which is already suffering from foreign imports; chemicals, electrical appliances, automobiles?" he asked.

Boney said the American government allows foreign textile mills to buy American cotton at a price 25% below the price American mills have to pay for the same cotton.

"Don't forget also," he said, "that foreign labor is paid about one-tenth the wage we have to pay. We are exporting jobs when we buy foreign imports."

IT PAYS TO STANDARDIZE ON STANSCREW



Stanscrew suggests... **BRUNING** verifies... Socket set screws solve Copyflex problem

Charles Bruning, Inc., manufacturers of the widely accepted Copyflex, recently found that the fasteners they were using to attach the unit's sprockets and gears did not meet the rigid performance standards they set up for all component parts.

Bruning's distributor arranged a visit from a Stanscrew specialist, who recommended Stanscrew's regular socket set screws. Bruning verified their operational efficiency with exhaustive laboratory and engineering tests . . . made the conversion . . . and eliminated the loosening problem (plus eliminating many service calls).

Now, 100 Stanscrew fasteners are specified for each Model 675 Copyflex. In addition to

socket set screws, they include socket head, hex head, and fillister head cap screws which are used in a wide variety of critical applications.

Like Bruning, more and more industrial leaders are learning it pays to standardize on Stanscrew. Their more than 5,500 different standard fasteners provide economical answers to the overwhelming majority of all industrial requirements . . . and are produced to consistent quality standards which eliminate production problems and lower assembly costs.

The Stanscrew fastener specialist may be able to help you cut fastener costs. Your Stanscrew distributor will be happy to arrange a prompt visit. Call him today.



FASTENERS

CHICAGO | THE CHICAGO SCREW COMPANY, BELLWOOD, ILLINOIS

HMS | HARTFORD MACHINE SCREW COMPANY, HARTFORD, CONNECTICUT

WESTERN | THE WESTERN AUTOMATIC MACHINE SCREW COMPANY, ELYRIA, OHIO

STANDARD SCREW COMPANY 2701 Washington Boulevard, Bellwood, Illinois

Automotive Perspective

(This column is the third in a series on 1961 model cars with fleet potential. Next week: Mercury, Pontiac, Rambler American, and Rambler.)

Buick and Oldsmobile are introducing two nameplates new to fleet owner, and their fleet sales managers are working aggressively to whip up business. Buick already has reported a whopping 3,800-unit order for its compact "Special." Oldsmobile took advantage of a recent fleet users conference to stage an elaborate showing of its "F-85."

These GM compacts are cousins under the skin, as both share the same basic body shells and engines. Their appeal is to owners who wish luxury and neck-snapping performance in a small package, without too much sacrifice of gasoline economy.

Chevrolet General Manager Edward N. Cole, untroubled by the advent of additional compacts, expects to sell 300,000 or more Corvairs and have another record year for the standard Chevrolet. He recently discounted speculation that Chevrolet was planning a new car smaller than the Corvair.



Buick Special

Buick has styled its new compact to look exactly like what it is—a small Buick even to the traditional but useless ventiports. A 112-in. wheelbase keeps over-all length down to 188 in., and it weighs only 2,700 lb., 1,600 lb. lighter than conventional Buicks.

A 155-hp, all-aluminum engine is standard, and since one horsepower is available for each 17 lb. of car weight, snappy performance is assured. This engine operates on regular grade gasoline and is designed to be compatible to existing lubricants and antifreezes. Alloy iron cylinder sleeves are cast integrally with the block.

A three-speed synchromesh transmission is standard, but most buyers are expected to specify the optional two-speed torque converter, claimed to be the most simplified automatic transmission on the market.

Only two unitized body styles will be offered initially: A four-door sedan and a four-door station wagon. Headroom of 38.4 in. is greater than most compacts, and 14 cu. ft. of samples can be packed into the trunk. The wagon has a one piece rear gate that is hinged at the roof for easy loading. A sliding window in the gate will be standard on unit number 3001 and beyond, making it more satisfactory for family use. Buick expects to build 180,000 Specials during the 1961 model run.

Summary: Engine—aluminum 155-hp V-8 described above standard equipment. Fuel—Regular gasoline. Tires—6.50 x 13.

Price: \$2,175* for the four-door sedan, \$2,425* for the station wagon.



Oldsmobile F-85

Oldsmobile's pert little F-85 is 0.2 in. longer than the Buick Special, a figure almost within production tolerances, and 30 in. shorter than the 1960 Olds 88. It is 71.6 in. wide and 52.6 in. high. This maker also strived for styling identification with its bigger models.

Secret of the lowness is a newly designed two-piece drive shaft supported at the center by a cuff-type rubber mount and connected through a double cardan, constant velocity joint. The shaft snuggles into the underbody configuration like a bent straw to reduce, but not entirely eliminate, the center hump.

Both the Olds and Buick aluminum engines are of 215-cu. in. displacement and are rated at 155 hp. Piston and combustion chamber designs differ, however, as do valve trains. Compression ratio of the F-85 is 8.75 to 1, permitting operation on regular grade gasoline. Olds also offers an all-new automatic transmission at \$175 extra. The F-85 body styles include only a four-door sedan and a four-door station wagon.

(Turn to page 26)

Here's your weekly guide to . . .

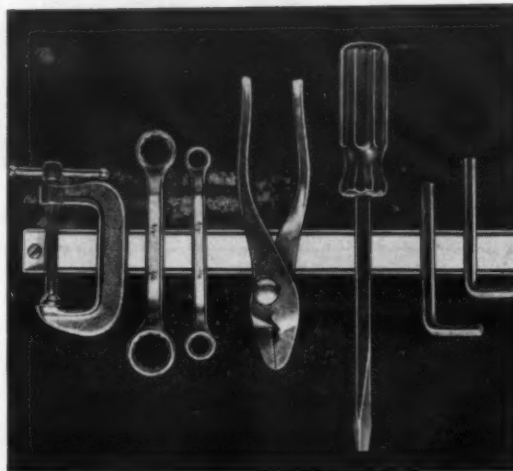
Tool Holder

Grips Tools Magnetically

Magnetic tool holder retains assorted tools of normal size and weight. Two or more may be placed together for unusually large or heavy tools. Unit (1-in. wide, 12-in. long) is screw-mounted, but is available with magnetized back for attachment to metal surfaces.

Price: \$2; \$4 (magnetized back). Delivery: immediate.

Magnetic Products Div., Jess Corp., 15770 Telegraph Road, Detroit 39, Mich. (PW, 10/3/60)



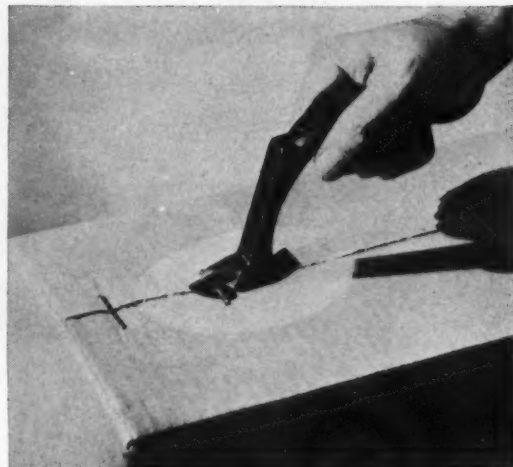
Staple Remover

For Heavy-Duty Use

Cast-aluminum handle tool is designed for quick removal of heavy-duty staples from shipping containers and other stapled items. Steel base-blade is inserted under the staple and then worked back and forth. A slight downward pressure on handle frees staple.

Price: \$1.35. Delivery: Immediate.

Bostitch, Inc., 2019 Briggs Drive, East Greenwich, R. I. (PW, 10/3/60)



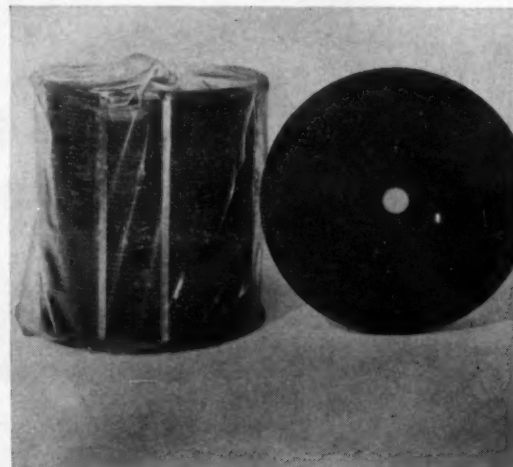
Metal-Cutting Disks

Fiber-Backed

Aluminous-oxide, resin-bonded abrasive disks, designed for metal cutting, are available in 7-in. and 9 1/8-in. diameters in five standard grains. Disks are fiber-backed and come in pressurized 100-unit package with complete 360-deg. protection by metal straps.

Prices: \$27.59 to \$44.94 per 100-unit package. Delivery: immediate.

Chicago Wheel & Mfg. Co., 1101 West Monroe St., Chicago 7 (PW, 10/3/60)



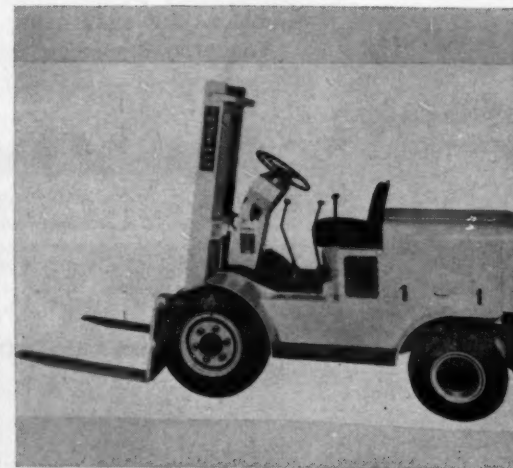
Fork Lift Truck

Has 3,000 lb. Capacity

Pneumatic-tire fork lift truck, with 3,000 lb. capacity, has power steering and lift speed of 55 ft. per minute. Frame is 7-in. narrower than similar lift trucks. Resulting decrease in turning radius of nearly 34 in. makes it more applicable as indoor-outdoor equipment.

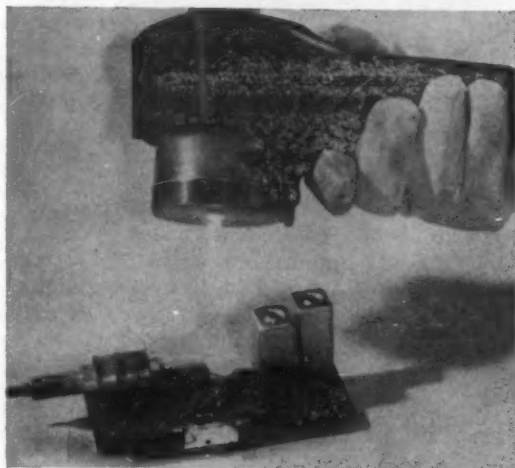
Price: \$5,340 to \$7,300. Delivery: 4 wk.

Knickerbocker Co., 603 Liberty St., Jackson, Mich. (PW, 10/3/60)



New Products

Another PURCHASING WEEK service: Price and delivery data with each product description.



Spray Gun

Applies Rapidly

Jet spray gun deposits epoxy resins onto any surface for coatings of virtually any desired thickness. Deposited coating is extremely durable and does not need further curing. Because of the bond formed, thinner coatings may be used and applied rapidly. Price: \$5,500 to \$9,000. Delivery: approx. 5½ wk.

Plasmadyne Corp., 3839 S. Main St., Santa Ana, Calif. (PW, 10/3/60)



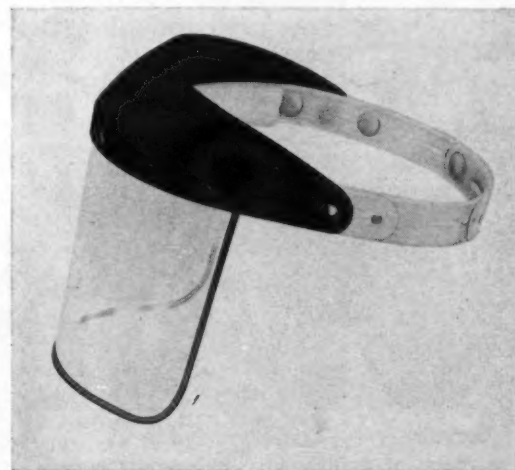
Variable Speed Drive

Features Light Weight

Fractional hp. variable speed drive is said to be 15% lighter than similar units. Speed ranges from 4,660 rpm. to 1.2 rpm. with up to 10 to 1 variation. Available in ¼, ½, and ¾ hp. ratings. Larger pulley diameters assure a cooler running, longer lasting belt.

Price: \$138.60 (¼ hp.). Delivery: approx. 2 wk.

Sterling Electric Motors, 5401 Telegraph Road, Los Angeles 22, Calif. (PW, 10/3/60)



Face Shield

Has Replaceable Parts

Face shield weighs 3¼ oz. complete with a 6-in. x 11½-in. x 0.020-in. window. All parts are replaceable and model allows the use of a great variety of windows or screens. Adjustable head band may be cleaned with any detergent or soap.

Price: \$2. Delivery: immediate.

Fibre-Metal Products Co., 5th & Tilghman Sts., Chester, Pa. (PW, 10/3/60)



Paging System

Easy To Operate

Staff locating and paging system combines both voice and beep signal. It includes typewriter-size transistorized transmitter, simple wire loop antenna surrounding area to be covered, and 5-oz. pocket receiver.

Price: From \$395 (transmitter); \$125 to \$149 (receiver). Delivery: immediate.

Multitone of Canada, Ltd., 130 Merton St., Toronto, Canada, (PW, 10/3/60)

This Week's

Product Perspective

OCTOBER 3-9

A TIRE BUYER'S LOT IS NOT AN EASY ONE.

He must do his shopping in a market that includes a bewildering variety of tire types and sizes—with more being added all the time—and amid a welter of claims and counter claims about price and quality.

• The usual difficulties of buying are compounded—in his case—by the tire industry's inability (or reluctance) to formulate a set of mutually agreeable quality standards. Right now, the only guide the industry provides is its so-called "100-level" designation, which is given to original equipment (OE) tires.

Although 100-level applies more to price than quality, it does give buyers some kind of yardstick to measure quality, since it subjects the tire makers to some pretty tough minimum specifications set up by the auto companies.

However, it's not an industry-wide standard, because it necessarily applies only to the five OE suppliers—Goodyear, Firestone, U.S. Rubber, B. F. Goodrich, and General Tire—all of whom also supply the replacement tire market. All of the other replacement tire makers are pretty much on their own when it comes to quality—since they don't have to conform to any standards set by an outside source.

• The 100 level standard works primarily as a price bench mark. Tires with more rubber (heavier tread) or more nylon are more expensive, of course. Their numbers are based simply on the percentage of price above the 100-level price—hence, they are referred to as 120 level, 130 level, and so on. As one OE tire manufacturer put it: "Levels of tires refer to price and price alone in relationship to our original equipment tire price."

It should be clear from all this that the 100-level doesn't provide a reliable yardstick for measuring quality—as far as the buyer is concerned. The fact that one maker says his tires are 110 level or 120 level doesn't mean necessarily that they're any better than the 100 level on new cars—it just means they cost more.

• The only real checks on quality are made by independent research outfits, such as Smither Laboratory, Akron, Ohio, and by General Services Administration (GSA), the agency that buys all tires for the federal government. GSA has issued a Federal Supply Catalog listing all the brand names that come up to Federal Specification ZZ-T-381 j. This spec, which is used as the basis for all GSA tire purchases, is a rich source of information on tire design, compounding, and construction—and, what's more, it can be adapted to almost any company's needs.

Tire buyers can find some helpful pointers on quality standards in a recent discussion of government specifications by George A. Sackett, director of Repair Materials Development, Armstrong Rubber Co. Here are the things to look for:

TREAD DESIGN—The more complex the tread design, the better the traction, says Armstrong. One way of getting more complexity is by using metal inserts called sipes.

Look for depth of siping. Some tires soon wear smooth because the siping doesn't penetrate more than a third of the way through the tread design.

Choose the design with a flat tread. The design with a round tread—or one with a short radius of curvature—will wear faster.

CARCASS STRENGTH—This depends on the strength of the yarn used in the cords, the cord strength, the number of cords, and the way the layers of cords (called plies) are put together.

Generally, yarns are twisted together to make cords. A high-twist cord has greater resistance to fatigue, but less resistance to bruise and rupture. It takes the combined skills of tire and textile engineers to achieve the proper balance.

Cords are made stronger by using more yarns—thus a heavy cord is stronger than a light one. The number of cords for each inch of width is another important strength factor. Fewer cords to the inch means less strength—but it also reduces the cost of the tire.

ROAD WEAR—Tread design, type of rubber and carbon black, and the way they are put together—all of these factors influence road wear.

Natural rubber is best for conditions where high heat is developed—and where maximum resistance to cutting is needed, such as on earthmover tires. Cold synthetic rubber is generally recognized as being superior to natural rubber for normal driving conditions.

A very important factor in tread wear is the type of carbon black and its blend (or dispersion) in the rubber. There are three types in general use—high abrasion furnace, intermediate super-abrasion, and furnace and super-abrasion furnace. The blacks produce more abrasion resistance in the order named, and thus higher mileage. They also carry higher tags in the same order.



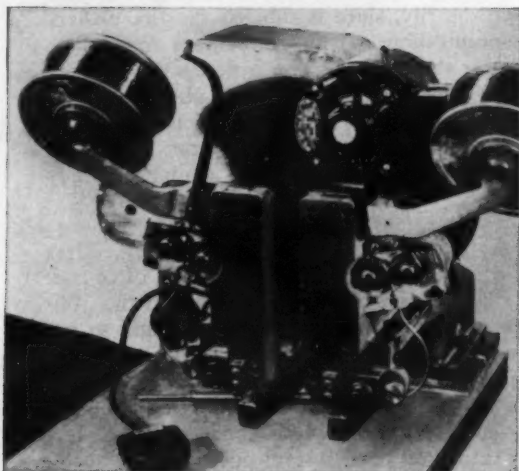
Electric Car

Recharges Overnight

Designed for in-plant transportation, this one-battery electric car is just 35-in. wide. It seats one man and his equipment. Car has a speed limit of 4½ miles per hour. It can be recharged overnight by simply plugging in any outlet. Fleet discounts are available.

Price: \$395. Delivery: 5 days.

Birdie Co., Inc., 393 Springfield Ave., Summit, N. J., (PW, 10/3/60)



Wire Stitching Machine

Has Adjustable Head

Dual-head machine makes and inserts two staples simultaneously from wire coils for fastening materials up to ¾ in. thick. Heads can be adjusted from ¾ in. center to center of staples, to 9 in. Two wire coils make approximately 120,000 staples before reloading.

Price: \$1,200 to \$1,400. Delivery: 4 wk.

General Staple Co., 28 East 22nd St., New York 10, N. Y. (PW, 10/3/60)



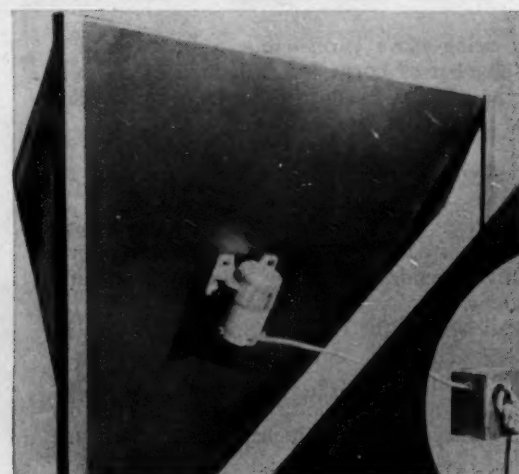
Sealing Tape

Removes Easily

Reinforced sealing tape allows easy fiber box opening without use of tear strings or rip cords. Tape can be rapidly and efficiently removed, permitting multiple reclosing and carton reusability. Available in cartons containing ten, 3-in. wide, 300-ft. rolls.

Price: \$16.10 per ctn. (in 100 ctn. quantities). Delivery: immediate.

Atlantic Gummed Paper Corp., 1 Main St., Brooklyn 1, N. Y. (PW, 10/3/60)



Electric Vibrator

Mounts in Any Position

Electric vibrator, designed for moving or settling materials, has companion unit for regulating both vibration frequency and impact intensity. Unit has frequency range of from 1,500 to 9,000 vibrations per minute, any impact range of 9 to 300 lb. Speed regulator unit can be mounted in any position to suit the operator.

Price: \$97 (controls extra). Delivery: immediate.

Cleveland Vibrator Co., 2828 Clinton Ave., Cleveland, Ohio. (PW, 10/3/60)

Automotive Perspective

(Continued from page 24)

Aside from the exterior styling, differences between the F-85 and the Special worth mentioning include:

Fuel tank capacity of the F-85 is 16 gal.; the Special, 14 gal.

The Special uses a polyurethane element in its carburetor air filter. The F-85 carburetor is completely covered by a special metal housing that is claimed to give better silencing and weather protection.

Brake design for each differs so that parts and lining are not interchangeable, although the total lining area of 130 sq. in. is the same.

Summary: Engine—Aluminum OHV V-8, similar to the 155-hp standard equipment in the Buick Special but with design changes noted above. Fuel—Regular gasoline. Tires—6.50 x 13, 7.00 x 13 optional.

Price: Approximately \$2,175* for the four-door sedan, \$2,425* for the station wagon.



Chevrolet

The standard six Chevrolet continues to be the world's largest selling car, beating Ford in the 1960 model run by an estimated 300,000 units. Availability of the Corvair does not seem to affect its popularity.

The 1961 body is entirely new, but still utilizes the conventional frame-type construction. The winged rear deck lid has been replaced with boxy design that opens at bumper level for easier loading.

The 235 cu. in., overhead valve six-cylinder engine, fundamentally unchanged for many years, is still standard in all models. However, Chevrolet also offers the largest number of optional engine-transmission combinations in the industry. There are Chevrolets sold with an engine that turns out 335 hp. at 5,800 rpm, but the owner must keep three carburetors in turn. Fuel injection is also available, as well as two varieties of automatic transmissions and overdrive.

The trend away from longer, wider bodies is noted in the fact that new Chevrolets are 1.5 in. shorter and 2.4 in. narrower than this year. Over-all length is 209.3 in., width 78.4 in.

Summary: Engine—235-cu. in., OHV six standard equipment. Optional at about \$100 extra is a 170-hp V-8 that also uses regular fuel. Other options range up to 335 hp but require premium fuel. Tires—7.50 x 14.

Price: Approximately \$2,100*.



Corvair

Chevrolet's bold venture into the realm of unorthodox engineering is continued for 1961 with little change. All of the bugs that affected the air-cooled, rear mounted engine on early 1960 models have been removed. These included problems from carburetor icing and fan belt breakage.

The gas-guzzling heater is now optional in favor of one that draws heat from the perimeter of the engine compartment, much like the manifold heaters on the early model A Fords. A manual choke has replaced the automatic device previously used, and at least the illusion of using less gas is enhanced by increasing the fuel tank capacity from 11 to 14 gal.

Body models now include two and four-door sedans and a four-door station wagon. The latter is in addition to the station wagon included in the Corvair 95 series (page 32). All "conventional" 1961 Corvairs now have the spare tires mounted in the engine compartment. If this is confusing, remember that the engine is at the rear. A feature of interest to salesmen in the sedan is a rear seat that folds forward to make a flat floor for carrying bulky luggage or parcels.

Summary: Engine—air cooled, aluminum, horizontally opposed 6-cyl. with a choice between 80 and 98 hp. Automatic and three- and four-speed manual transmissions available. Fuel—regular gasoline. Tires—6.50 x 13.

Price: Approximately \$1,850*.

* Prices are for cheapest models in line and exclude transportation, handling charges, taxes, and optional equipment.

Don MacDonald, McGraw-Hill Detroit Bureau

National Carbon Develops Graphite For Military Use

New York—A new family of high-density graphites that operate at temperatures as high as 5,500 F has been announced by National Carbon Co., Div. of Union Carbide Corp.

The new material is produced in a novel hot-working process that recrystallizes the graphite to give it the required high strength and exceptionally low creep rate. By closely controlling the process, National Carbon said, a variety of supergraphites can be produced—each with its own set of properties suited to a particular application.

One grade, for example, shows different strength vs. density curves for measurements made in different directions with respect to the grain. Thus, strength with the grain shows the expected increase as density increases; whereas against the grain, strength decreases. By selecting the proper point on the curve, a recrystallized graphite with the desired properties can be produced.

Room-temperature flexural strength of the new material is about 6,000 psi., compared to 3,000 to 3,500 psi. for conventional graphite. As is the case with all artificial graphites, strength increases at higher temperatures, until at 4,500 F it is approximately double the room temperature value.

Most promising application, the company said, is in high-temperature space applications. In rocket motor tests, for example, nozzle inserts made of the recrystallized graphite stood up as well as—or better than—such high-temperature materials as tungsten and pyrolytic graphite.

Details of the production process have been classified by the Air Force, and all production for the immediate future has been earmarked by National Carbon for the military.

New Polyethylene Resin Withstands 3,000 Hours Of Severe Stress Tests

Kansas City, Mo.—Spencer Chemical Co. announced development of a new polyethylene molding resin that it says sets new standards for resistance to environmental stress cracking.

The new resin, designated Poly-Eth 4204, is made by Spencer's "polymorphous" technique, first used to produce film resins. Basically, the process involves the production of a controlled molecular pattern and of a balance between the crystalline and non-crystalline elements in a resin.

The new material, according to Spencer, has withstood more than 3,000 hours of the severest standard stress crack testing in the laboratory. Other materials tested under similar conditions failed within 21 hours, the company said.

Among the applications listed for Poly-Eth 4204 are housewares, containers, closures, pouring spouts, and other products that are subjected to environmental stress cracking.



Hurrah for the stubborn strength of steel!

This is common practice—a load of lumber is being dropped at a building site. The load weighs about 14,000 pounds. The steel strapping that holds it together will take the impact all right. Then the load will just sit there, and the stubborn strength of steel will keep it sitting tight—too tight to pilfer.

Tension ties this load together, bundles, binds, or bales your product, or reinforces your package. Steel strapping holds tension, without stretching, in spite of heat, cold, moisture or dryness. It is unaffected by oil or solvents. And it is low in cost. In fact, for equal lengths of equal strength, we haven't found anything that costs less than steel.

Steel strapping is strong, and is available in the strength you need, from 400 pounds tensile in our smallest size to over 15,000 pounds in our largest.

Steel strapping is easy to handle. It is smooth and straight, firm enough to be put

on square and to be pushed through a void or pallet, flexible enough to loop around a package and to pull tight around corners.

It is joined by a visible, inspectable mechanical seal that can carry your trademark in colors. There are Signode tools and machines to apply it with the right amount of tension at any desired speed, without waste.

Experienced Signode packing and shipping experts are at your service at no cost to you. They will show you ways to cut costs and improve results. They'll train your operators and maintain Signode tools in good order.

Let us put a Signode man to work for you ...on our payroll.

★ ★ ★

New Free 38-Page Booklet



Send for your copy of "Better Ways to Package, Unitize, and Ship." Just issued. Shows ways to save money with latest methods, describes and illustrates Signode hand and power tools, automatic strapping machines, strapping, and accessories.



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Your Guide to New Products

(Continued from page 26)



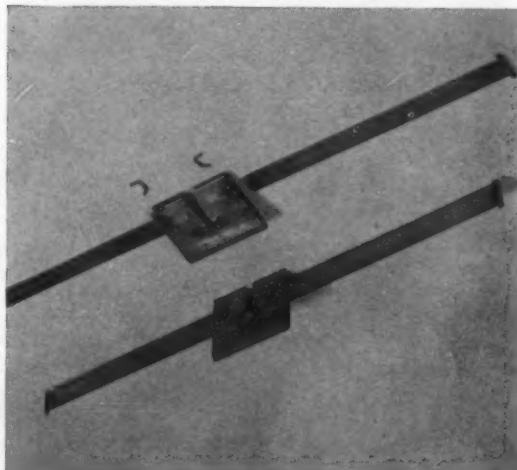
Nail Driver

Operates in Tight Spots

Air-operated tool drives 20-penny to 60-penny nails at the squeeze of a trigger. Nails are safely enclosed in a sleeve while being driven. Lightweight nail driver can be operated in tight spots from a small industrial-type air compressor. Unit is only 14 in. long.

Price: \$146.50. Delivery: immediate.

Chicago Pneumatic Tool Co., 6 East 44 St., New York 17, N. Y. (PW, 10/3/60)



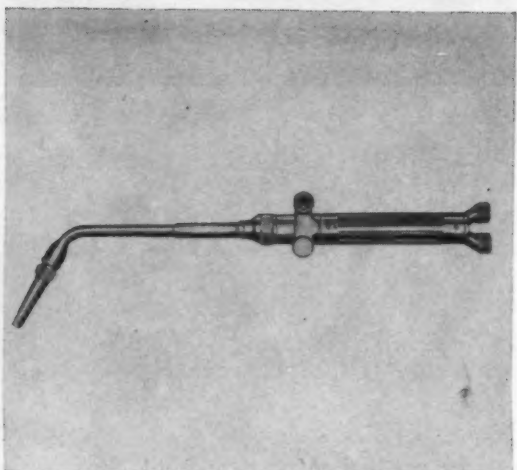
Furnace Hanger

Has Reversible Blades

Steel furnace hanger is designed to carry articles of various shapes through a heat-treating furnace. Lightweight hanger can be straightened cold and its blades can be reversed and replaced. Recommended for the firing of vitreous enamels on steel or cast iron.

Price: \$10. Delivery: immediate.

Alloy Engineering Co., 70 Sheldon Road, Berea, Ohio. (PW, 10/3/60)



Brazing Torch

Features H-Tip

Unit features 1390 'H' tip for use with natural gas where brazing or silver soldering is necessary. Operates on high, medium, or low pressure, producing an extremely hot, clean flame. Advantages include lower fuel gas cost and clean, finished work—free of carbon deposits.

Price: \$21.50. Delivery: immediate.

Harris Caloric Co., 5501 Cass Ave., Cleveland, Ohio. (PW, 10/3/60)



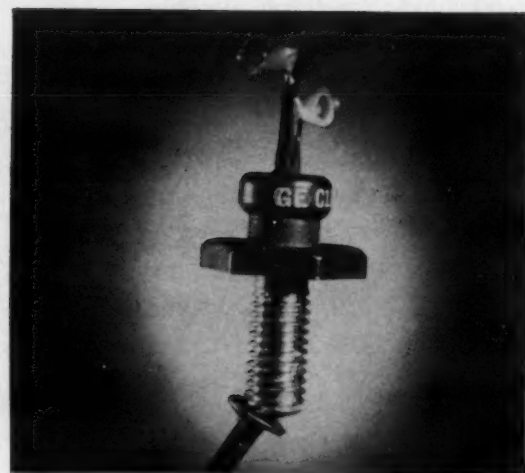
Ball Point Pen

Protects Checks

Device, a combination check protector and ball point pen, enables user to write check with the pen end and tamper-proof it with roller unit on the other end. A lightweight, plastic base plate is placed under the check and roller device is then passed over surface of section to be protected.

Price: \$3.98. Delivery: immediate.

Hamilton-Pax, Inc., 3745 North Kedzie Ave., Chicago 18, Ill. (PW, 10/3/60)



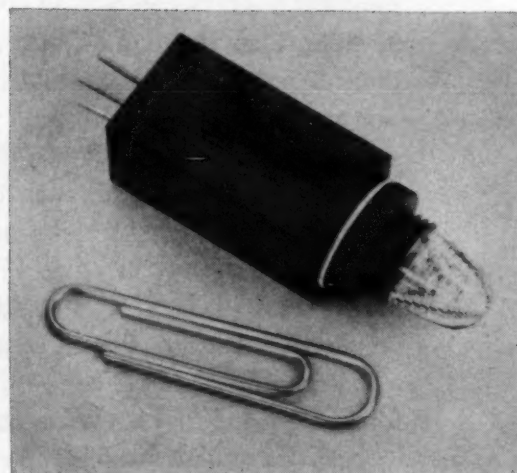
Rectifier

Available in 8 Models

Low-current, silicon controlled rectifier is a three-junction semiconductor device. Available in eight models with voltage ratings from 25 to 400 having a typical turn-on time of 2 microsec., and turn-off time of 15 microsec. Recommended in light dimming controls, speed controls for motors, etc.

Price: \$4.50 to \$35.50. Delivery: immediate.

General Electric Co., Charles Building, Liverpool, N. Y. (PW, 10/3/60)



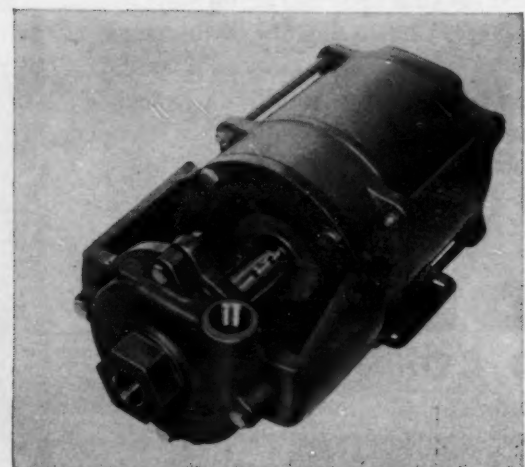
Neon Indicator Light

Operates on Low Voltage

Miniature neon indicator light combines advantages of low current drain and low voltage operation. Unit mounts in 3/8 in. hole and can be operated directly from basic d-c power supply or additionally controlled by a high impedance signal. Recommended for portable battery-operated equipment.

Price: approx. \$7.50. Delivery: approx. 6 wk.

Special Products Div., Telex, Inc., 1633 Eustis St., St. Paul (PW, 10/3/60)



Centrifugal Pump

For Chemical Firms

Heavy-duty, standard centrifugal pump is constructed of superalloys, Hastelloy B and C, for service outside the realm of stainless steel. Unit was designed to meet standardization programs of multi-plant chemical companies. Mechanical seals are made of Teflon or carbon combined with ceramic or Hastelloy.

Price \$241 to \$485. Delivery: immediate.

Eco Engineering Co., 12 New York Ave., Newark 1, N. J. (PW, 10/3/60)



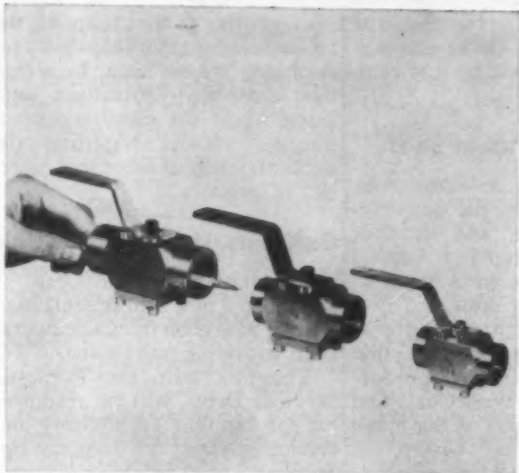
Towel Dispenser

Made of Aluminum

Towel dispenser cabinet, of anodized aluminum, eliminates rust and wearing away of paint, retaining sleek appearance with a minimum of maintenance. Directions for use are permanently embossed on cabinet front.

Price: Leased free to towel purchasers. Deliver: immediate.

Bay West Paper Co., 1100 W. Mason St., Green Bay, Wis. (PW, 10/3/60)



Instrument Valves

Feature Teflon Sleeves

Instrument plug valves, featuring Teflon sleeves, are available in standard 303 and 316 S.S. in sizes 1/4 in. through 1 in. Recommended for on-off use on rated pressure in temperatures ranging from -50F to +400F, with gas or liquid, corrosive or noncorrosive media.

Price: \$15 to \$40. Delivery immediate.

Continental Mfg. Co., Cincinnati, Ohio. (PW, 10/3/60)



Cleaning Gun

Weights 3 lb.

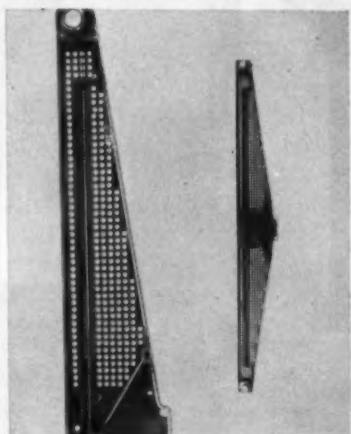
Cleaning gun runs on any compressed air line to clean, rinse, and dry engines, motors, machinery, or equipment, and can spray insecticide, solvents, steam, water, or paint. The device, of chrome-finished 19 gage tubular steel, weighs just 3 lb. Price: \$19.95. Delivery: 1 wk.

Bonus Products, 3001 S. Kedzie Ave., Chicago 23, Ill. (PW, 10/3/60)

New Jersey Zinc Awards \$1,000 Casting Prize To Victor O. Anderson

Chicago—Top prize in New Jersey Zinc Co.'s contest—"Zinc Die Casting of the Year"—was awarded to Victor O. Anderson of A&A Die Casting Co., Gardena, Calif. R. G. Kenly, New Jersey Zinc vice president, presented the \$1,000 award at the annual meeting of the American Die Casting Institute here.

The prize-winning entry is a zinc die casting designed for use as the vacuum chamber for an Ampex digital tape handler for



PRIZE-WINNER: Casting that won New Jersey Zinc award has unprecedented 515 cored holes.

computers, which handles tapes at speeds up to 1,000 fpm. The die casting has a total of 515 cored holes, which is unprecedented in the industry, according to Anderson.

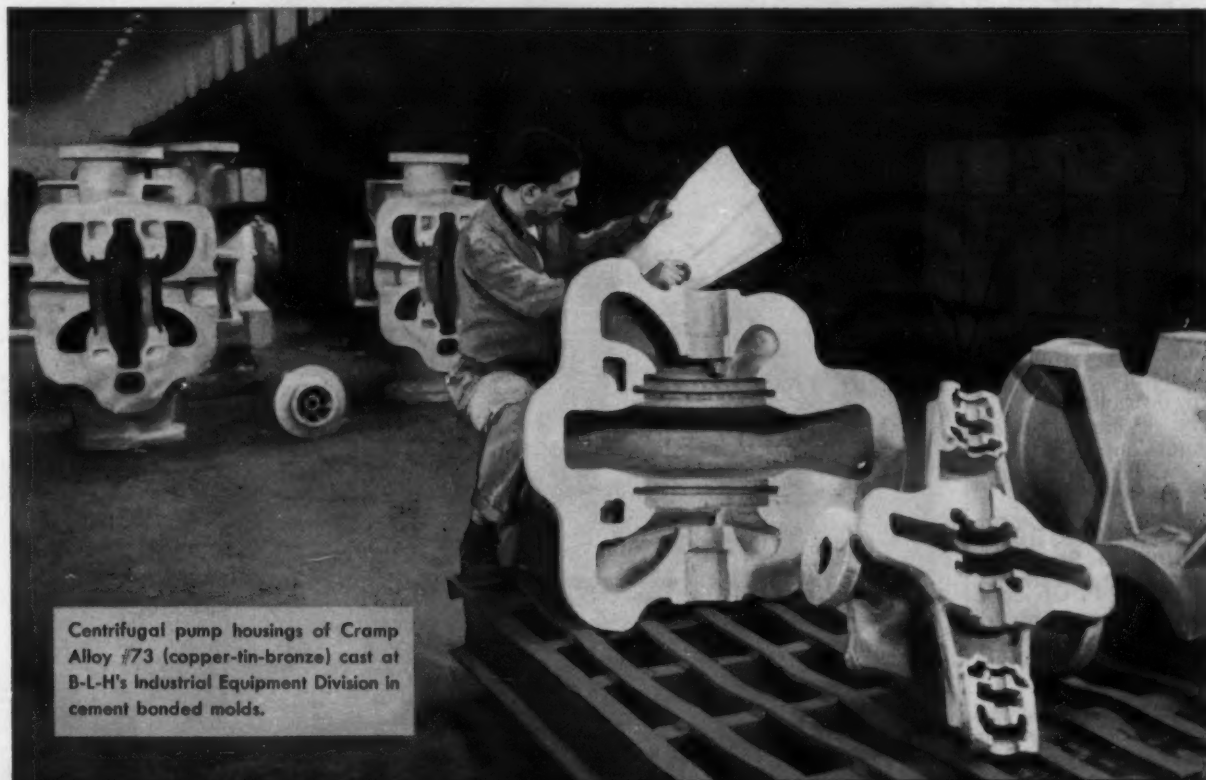
The part, formerly machined from aluminum bar stock, represents a savings of 95%, Anderson added. It is 32 in. long, 3/4 in. wide, and 1 1/2 in. deep. Wall thicknesses vary from .025 in. to a maximum of .175 in. The two slots, which run almost the length of the part, are a scant .007 in. wide, and are actually cast within .020 in. of the surface before milling.

Asbestos-Cement Sheets

Ambler, Pa.—Keasbey & Mattison is now marketing decorative asbestos-cement sheets in pre-finished, permanently colored form.

The new colored sheets—first of their kind, according to K&M—are expected to have a wide application in building and home decorating.

The finish, which is claimed to have five times the life of ordinary paint, is applied in a special dual-stage process. This produces a washable, water-resistant coating, 3 mils thick, in any one of 15 colors.



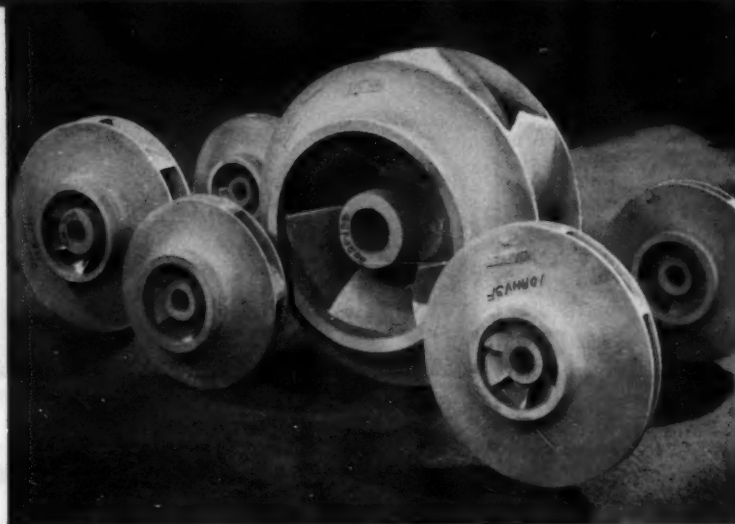
Centrifugal pump housings of Cramp Alloy #73 (copper-tin-bronze) cast at B-L-H's Industrial Equipment Division in cement bonded molds.

Behind the excellence of these intricate B-L-H castings...

... are cement bonded molds. Thanks to them, we can hold our nonferrous castings closer to the pattern and maintain tighter tolerances than is possible with sand molds. The result? Castings inherently more precise and needing only minimal cleaning and finishing. All this at competitive prices.

Whatever your requirements—job shop or high-production foundry work, castings of many alloys, weighing from a few ounces to 100,000 lb.—look to B-L-H. And be sure to write for a copy of our illustrated Foundry Bulletin 6002.

Note clean core passages of these impellers for centrifugal pumps. They are cast of Nialite,® a B-L-H nickel-aluminum-bronze alloy.



BALDWIN · LIMA · HAMILTON

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Industry News in Brief

Electrada Buys Airite

Los Angeles—Electrada Corp. has acquired Airite Products, Inc., fabricator of titanium products, and will operate the firm as a division.

Electrada is engaged in research and development programs in data processing, data retrieval, and space age instrumentation. Airite's facilities will be used to expand military and commercial projects. Airite sales last year were about \$3-million.

Allied to Add Space

New York—Allied Chemical Corp. will add 50,000 sq. ft. of additional research facilities to its property near Morristown, N. J.

Construction of three new buildings will include a new two-story research laboratory, a process laboratory for the firm's central research organization, and a warehouse and garage for ground maintenance equipment. Work is expected to be completed by June of next year.

B/W Adds Distributor

Philadelphia—The Hampden Chemical & Equipment Co. has been named distributor for the complete line of floatless liquid level and motor controls made by The B/W Controller Corp., Birmingham, Mich.

Plastic Plant on Stream

Los Angeles—B. F. Goodrich Chemical Co. has begun production of plastic resins at its new plant in Long Beach.

The plant will produce vinyl resins for a variety of consumer and industrial products, for customers in the Western states. The vinyl monomer, the raw material for the plastic compounds, will be supplied by the American Chemical Co.

A-C Buys French Firm

Milwaukee—Allis-Chalmers Mfg. Co. has bought controlling interest in a French company which makes air-cooled diesel farm tractors, engine generator sets, and industrial engines. The French firm is Etablissements de Constructions Mecaniques de Venduvre, S. A. of Paris.

A-C said the French firm would continue producing the present line of equipment for distribution through the A-C sales organization. Operations will be directed by A-C International.

Dashew Acquires Carroll Co.

Los Angeles—Dashew Business Machines, Inc., manufacturer of office equipment, has acquired one of its suppliers, J. B. Carroll Co., Chicago, in a diversification move into the plastics field.

Carroll specializes in the production and fabrication of precision plastic products. The purchase was made on an exchange of stock; no financial details were disclosed. The firm will be operated as a separate subsidiary.

A Dashew official noted that the company is ready to market a new type of plastic credit card de-

veloped with Carroll for use on electronic data processing equipment.

Name Change

Butte, Mont.—The American Brass Co., one of the nation's largest copper and brass mill product manufacturers, will change its name this week to Anaconda American Brass.

The company is a wholly owned subsidiary of the Anaconda Co. Since 1945, advertis-

ing, packaging, and marketing of brass mill products have been under the brand name Anaconda.

Texas Cement Plant Opens

Dallas—Texas Industries, Inc., has begun production at first cement plant to be built in north-central Texas since 1935.

The plant, located at Midlothian, has been under construction for 13 months. Capacity of the new facility is 1.4-million barrels annually. Texas Indus-

tries' operations in north-central Texas will use 60% of the output, the balance will be sold commercially.

Daystrom Makes Shift

Murray Hill, N. J.—Daystrom, Inc. is transferring the manufacture, engineering, and sales of potentiometers from Los Angeles to Archbald, Pa., in a move to cut subcontracting costs.

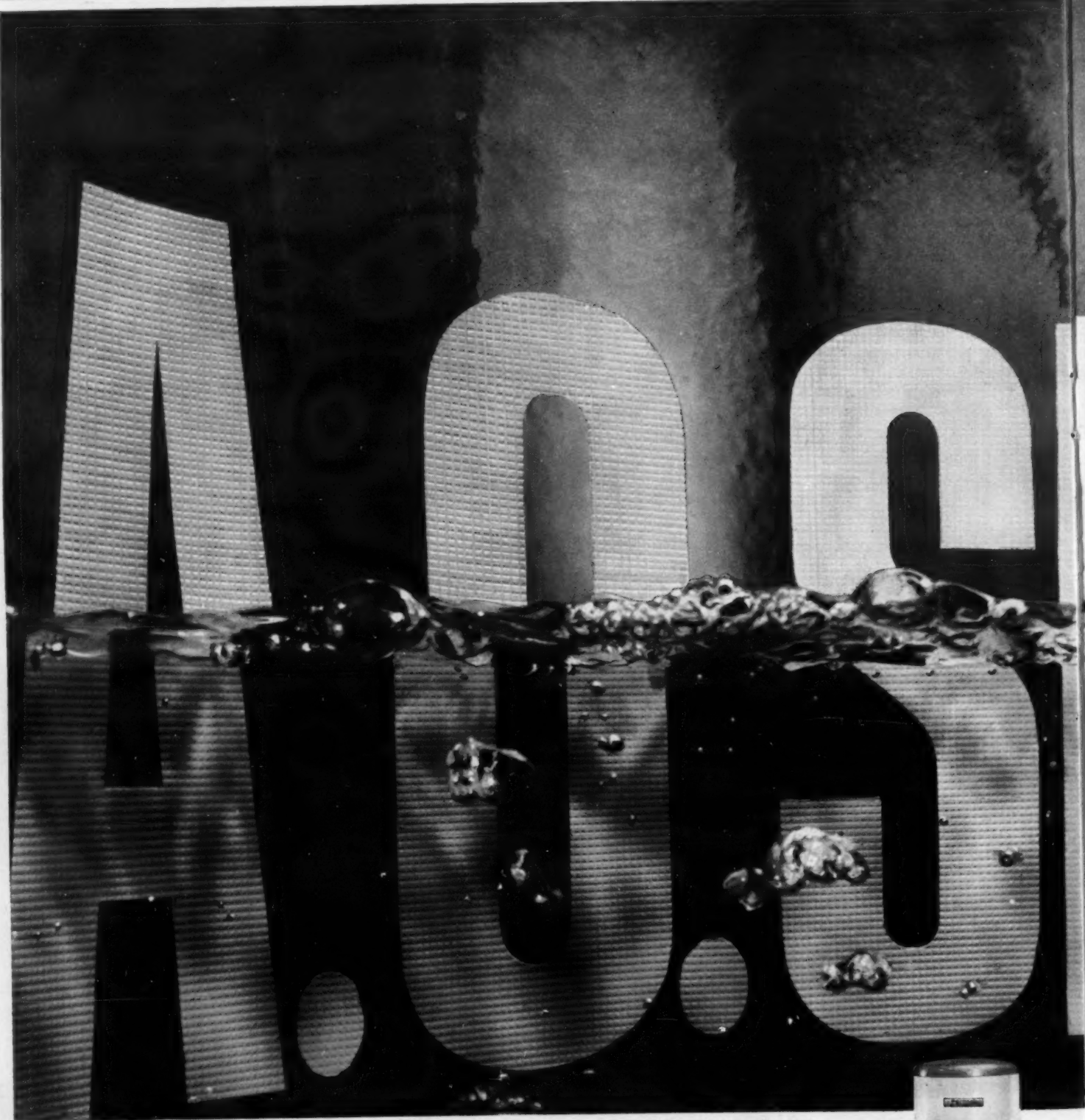
The shift is a part of a corporate expansion program that will result in increased productivity of both the West Coast and East Coast divisions of the firm's Defense Products Group, a spokesman said.

According to the company, the facilities and labor capability at Archbald are sufficient to permit the complete fabrication and assembly of the electronic components without requiring the subcontracting of labor to a diversity of vendors.

Gulf Sets Up Advisory Unit

Houston—Gulf Oil Corp. is setting up a new staff organization here to advise on domestic operations including purchasing.

The new unit, the Domestic Services Dept., will be responsible for handling all advisory and service elements for domestic operations.



Inside a Permaglas water heater, specially formulated glass lines the tank to guard against rust, year after year.

...the good name that stands
behind 5,000,000 Permaglas®
home water heaters



Mobil Chemical Plans New Facility

Beaumont, Tex. — Mobil Chemical Co. is stepping up its production plans in this area. It will build a separate benzene facility as part of the ethylene plant now under construction here.

The ethylene operation will begin in mid-1961, while construction of the benzene plant will be completed sometime early in 1962.

Proximity to customer companies has made this Southeast Texas area (which has some 40 chemical plants already located in a 100-mile radius of the city)

particularly attractive to Mobil. Houston Chemical Corp., now building a plant here to make T.E.L. (tetra-ethyl and tetramethyl lead) will buy ethylene from the supplier. Goodyear Tire & Rubber Co., which will construct a plant near Beaumont for production of new synthetic rubbers (natsyn and budene), will also buy raw materials from Mobil.

Initial yield of the benzene facility is estimated by the company at 30-million gallons annually. Toluene will also be produced at the plant.

Reynolds Metal Completes Plastic Plant Addition

Richmond, Va. — Reynolds Metal Co. is putting the finishing touches to a \$1-million expansion of its plastics plant at Grottes, Va.

The expansion will roughly double facilities for turning out "Reynolon," Reynolds' trade-name for its two industrial plastic films — water-soluble polyvinyl alcohol film (PVA) and oriented polyvinyl chloride film (PVC). The project includes installing new machinery, expanding boiler and other installations, modernizing equipment, and some added warehouse space.

New equipment, PURCHASING WEEK learned, calls for two band-casting machines for its water soluble PVA film, and one orienting machine to give its PVC film the proper gage for specific packaging applications. In the case of heat-shrinkable PVC, these include skintight overwraps for products ranging from frankfurters to phonograph albums.

Behind this drive to increase production facilities lies the whole story of Reynolds' 17-year penetration of the plastics market. It

has been taking place with a minimum of fanfare since Reynolds bought a plastics plant in 1943 at Gary, Ind., to produce barrier material (lamination of PVC film and aluminum foil for military uses such as wrapping guns).

After the war, Reynolds stayed in the plastics business, making cast PVC for plastic raincoats. In 1947, it expanded to PVA film (regular, not water soluble) which it put on the market in 1948. Principal use: 3-D movie glasses.

About that time, Reynolds launched research projects to (A) orient PVC, and (B) develop a water-soluble PVA. Ten years later (1958) it put both on the market.

Currently the biggest user of water-soluble PVA is Lestoil, Inc. for packaging its Lestare dry bleach. These soluble portion-control packets are also used for automobile additives, fertilizers, paints, and tints. (Regular PVA has found many industrial uses since its 3-D days; re-enforcing airplane parts is one example.)

Reynolds sees a rapidly-growing market for its plastic products. It is currently experimenting with other materials but has not determined what direction future expansion will take, according to a company spokesman. Reynolds' own biggest consumer application of PVC is in the company's "Reynolon" transparent plastic household wrap.

Container Corporation Plans Consolidation At Valley Forge Center

Philadelphia — Container Corp. of America plans to consolidate and expand certain phases of its research, product development, and marketing functions at its new Valley Forge marketing and research center in Oaks, Pa.

The Valley Forge site was selected because of its proximity to one of Container's principal folding carton operations and paperboard mills.

The center's activities will include development of new packaging concepts, evaluation of paperboard, plastics, and other packaging materials and process research on printing and fabrication techniques. It also will provide technical services to the company's carton plants and boxboard mills.

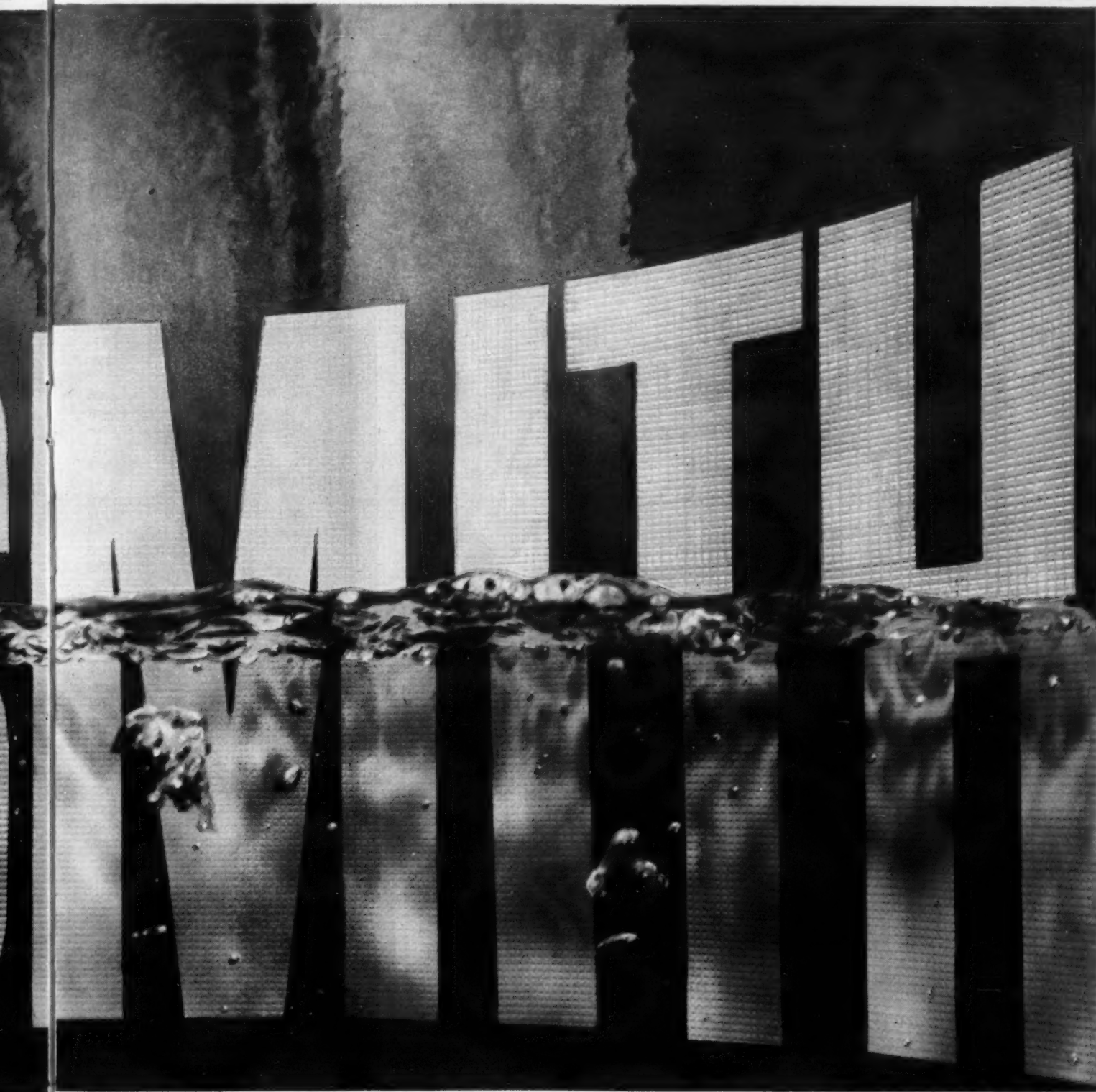
Complementing an extensive technical laboratory are other laboratories for structural design, graphic design, plastic research, machinery development, and package testing.

Extrusion Press Installed

Murrysville, Pa. — Pittsburgh Aluminum Alloys, Inc. has completed its plant expansion program with the installation of a new 1,500-ton Loewy extrusion press.

The additional equipment is part of a new 60,000 sq. ft. plant for the manufacture of custom aluminum extrusions.

The Loewy Press, capable of producing extrusions up to 6-in. in cross section, will more than double previous extrusion capacities in the 6000 series of heat-treated and nonheat-treated alloys.



Plain water becomes brutally corrosive inside a home water heater. It can quickly rust through ordinary metal tanks. That's why A. O. Smith researchers set out to find a better way to build water heaters — by lining the tanks with glass.

The results are a matter of record. Over the years, A. O. Smith's Permaglas Division has made more glass-lined water heaters than all other manufacturers.

And A. O. Smith pioneering in glass-fused-to-steel has found advantageous applications in scores of other products: brewery tanks, smokestacks, mechanized storage structures for farm and industry, chemical processing equipment — wherever corrosion or contamination could cause problems.

This is just one of the many fields in which A. O. Smith figures importantly. Metalworking, metering, motors and missiles are some of the others. For the full story, write for our brochure.

Through research... a better way

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CORPORATION

Milwaukee 1, Wisconsin
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Milwaukee 1, Wisconsin, U.S.A.



CORVAIR 95 CORVAN: Light-duty panel truck features wide access doors, low load floor height, large cargo area in relation to its over-all size.



CORVAIR 95 RAMPSIDE: Pickup features hinged side-loading ramp. Loading height is 14 in. at the side opening, and 26½ in. from ground at the rear.

Chevrolet Moves to Counteract Ford With New Series of Compact Trucks

Detroit—Chevrolet is meeting Ford head-on with its new series of rear-engine, cab forward trucks on a 95-inch wheelbase.

In addition, Chevrolet has two firsts:

- One variety of pick-up has a side section that hinges down to form a loading ramp flush with the ground.

- And the Greenbrier sports wagon is luxurious enough to double as a passenger car.

Ford's equivalent is somewhat more austere.

As in all Corvairs, the air-cooled 80-hp engine can be removed for repairs in less than 20 minutes' working time. The entire front suspension, too, may be removed as a unit with the front cross member.

Body models available include the two pick-ups, a delivery van, and the personnel carrier.

The latter can carry six passengers and 700-lb payload, or with the optional third seat, nine passengers and 250-lb. of cargo. The other trucks are rated up to 1,900 lb. payload. As there is no chassis as such in these vehicles, custom-built bodies are not feasible unless converted from the existing structure.

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Princeton 3-5191

AMARILLO, TEXAS
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P. O. Box 641
Drake 2-3295

AMARILLO, TEXAS
19 East "I" St.
P. O. Box 582
Adams 7-6791

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Alpine 2-2752

ATLANTA, GA.
161 Arizona Ave., N.E.
P. O. Box 5297 Sta. E
Drake 2-2511

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Twigg & Seventh St.
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Laurel, Md.
(Laurel) Parkway 5-5151

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National Gypsum Obtains Allentown Portland Cement

Buffalo—National Gypsum Co. has acquired the Allentown (Pa.) Portland Cement Co. in a \$31-million expansion into the Eastern cement market.

Allentown, which will operate as a division, has two mills—at Evansville and West Conshohocken, Pa.—with combined capacity of 4.5-million barrels annually.

The acquisition completed through an exchange of stock, is the second cement purchase by National Gypsum, which acquired the \$60-million Huron Portland Cement Co. of Detroit last year. National Gypsum now has capacity for producing 16.5-million barrels annually.

National's new cement making division will have its own sales force, production units, accounting and research facilities and will continue to operate under the Allentown Portland Cement Co. Allentown's two manufacturing plants produce cement from the firm's own limestone and shale deposits and supply a full line of products in Eastern Pennsylvania, lower New England, New Jersey, Delaware, Maryland, and Southern New York.

Like National's Huron Cement Division, Allentown sells its cement to ready mix concrete plants, cement block and pipe plants, road builders and building trades.

National-Standard Puts Perforated Metal on Coils

Carbondale, Pa.—National-Standard Co. is now making available perforated metal in coils up to 10,000 lb. from its Cross Perforated Metals plant here.

The large coils are expected to lengthen production runs, cut down time and raise productivity for users of perforated metal such as the electric motor and auto industries.

The 10,000-lb. blank coils may weigh from 4,000 to 6,000 lb. after perforation, depending on the open area of the pattern, a spokesman reports.

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Meetings You May Want to Attend

Previously Listed

OCTOBER

Fourth Annual Procurement Conference—sponsored by the Dayton Association of Purchasing Agents, Patterson Memorial Center, Dayton, Ohio, Oct. 7-8.

District 7 Conference NAPA—Peabody Hotel, Memphis, Tenn., Oct. 9-11.

National Aeronautic Meeting, Manufacturing Forum, and Engineering Display—Ambassador Hotel, Los Angeles, Oct. 10-14.

National Hardware Show—Coliseum, New York, Oct. 10-14.

1960 Products Show—Veterans Memorial Auditorium, Des Moines, Iowa, Oct. 12-13.

Purchasing Agents Association of Central Iowa—Products Show, Veterans Memorial Auditorium, Des Moines, Iowa, Oct. 12-13.

District 5 Conference NAPA—Mayflower Hotel, Washington, D. C., Oct. 14-15.

National Association of Oil Equipment Jobbers—Annual Meeting & Trade Show, Sheraton Jefferson Hotel, St. Louis, Mo., October 16-18.

National Metal Exposition and Congress—Trade and Convention Center, Philadelphia, Oct. 17-21.

Purchasing Workshop—Sponsored by Purchasing Agents Assn. of Chicago, Illinois Institute of Technology, Chicago, Oct. 18-19.

8th District Conference NAPA—Sheraton-Ten Eyck Hotel, Albany, N. Y., Oct. 18-21.

National Institute of Governmental Purchasing—15th Annual Conference and Products Exhibit, Hotel Shoreham, Washington, D. C., Oct. 23-26.

National Electrical Contractors Association—1960 Annual Convention, Las Vegas Convention Center, Las Vegas, Nev., Oct. 23-27.

National Business Show—Coliseum, New York, Oct. 24-28.

11th National Conference on Standards—American Standards Association, Sheraton-Atlantic Hotel, New York, Oct. 25-27.

Chemical Buyers Group of NAPA—Fall Conference, Pick Congress Hotel, Chicago, Oct. 26-27.

American Institute of Electrical Engineers Exhibition—Bellevue-Stratford Hotel, Philadelphia, Oct. 26-28.

14th Annual Automatic Vending Convention & Exhibit—Exhibition Hall and Fontainebleau Hotel, Miami Beach, Oct. 28-Nov. 2.

NOVEMBER

National Business Equipment Exposition—Memorial Sports Arena, Los Angeles, Nov. 1-4.

12th Annual Serv-A-Show & Industrial Exhibit—Toledo Civic Auditorium, Toledo, Ohio, November 2-4.

National Technical Conference & Exhibit—

American Production & Inventory Control Society, Sheraton-Cadillac Hotel, Detroit, Nov. 2-4.

Air Conditioning & Refrigeration Institute Exposition—Convention Hall, Atlantic City, Nov. 2-5.

Materials Handling Institute's Central States Show—Kentucky Fair & Exposition Center, Louisville, Ky., Nov. 8-10.

First National Die Casting Exposition & Congress—Detroit Artillery Armory, Detroit, Mich., Nov. 8-11.

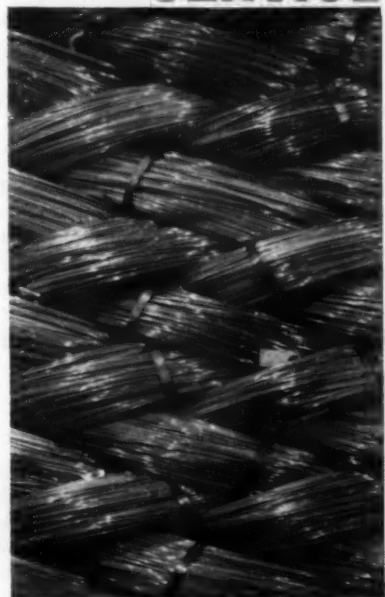
National Hotel Exposition—Coliseum, New York, Nov. 14-17.

Western Tool Show & Semi-Annual Convention—American Society of Tool Engineers, Ambassador Hotel and Los Angeles Sports Arena, Los Angeles, Nov. 14-18.

Office Buyers Conference—NAPA Office Buyers Group, The University Club, Boston, Mass., Nov. 16-17.

International Automation Exposition & Congress—Trade Show Building, New York, Nov. 16-20.

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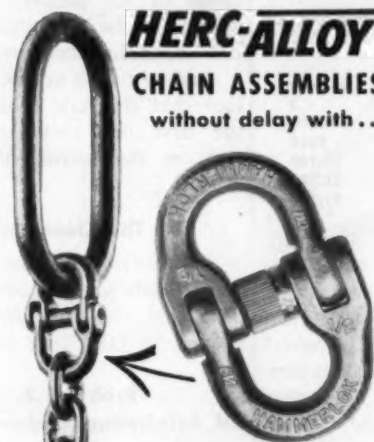
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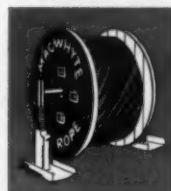
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P/W School for Strategists

PURCHASING WEEK herewith introduces you to the other half of the curriculum in its "School for Strategists."

Called "Operations Research," it's another figures-can-be-fun mathematical device to go with the "Games of Strategy" inaugurated by PW two weeks ago. Both are designed to help you sharpen your decision-making ability and cope more easily with the puzzlers that come up in everyday business life.

What Is It?

What is Operations Research? Stated simply, it's a systematic, scientific way of looking at, and solving, problems.

Here's the sort of problem it can solve for you.

You're the Purchasing Agent for the Sputter Missile Co., a firm that makes do-it-yourself kits for home-based lunar probes. You're seeking bids on a certain type of material, and you know that the more bids you receive, the better price you'll get from vendors competing hotly for your order. But at the same time, it costs about \$200 to process each bid. Therefore, the more bids, the higher will be the processing cost.

So your problem is this:

How many bids should you seek to effect your greatest saving?

Operations Research is the tool to use in solving a problem like this. It's a pencil-and-paper way of marshalling all the facts at your disposal, putting them down in an orderly—and meaningful—fashion, and then picking out your answer. It could be complicated, but **PURCHASING WEEK** has simplified its principles and made it fun.

Procedure

Here's the step-by-step procedure you'll use, for the most part:

- (1) Decide what you are trying to do (elementary, but sometimes the goal gets lost in the maze of complicating factors).
- (2) Amass all the available data on the problem.
- (3) Arrange your data in an orderly fashion.
- (4) Determine how many variables in the situation work on each other.
- (5) List your alternate courses of action.
- (6) Formulate a mathematical sequence of your problem (not so tough as it sounds).

Sample Problem

Here's how this would work with the Sputter Missile Co. problem.

(1) **What are you trying to do?** You're trying to decide how many bids you should ask for to effect the greatest possible saving.

(2) **What data do you have?** You know that it costs you \$200 to process each bid. You know, too, that if you invite only one bid, you'll be at the vendor's mercy—he'll set the price. But if competition rears its head, you'll get a better price. So by amassing all the price data you can get, you come up with these estimates of savings: \$500 if two vendors bid; \$850 if three bid; \$1,100 if four bid; \$1,200 if five bid, \$1,300 if six bid.

(3) **Arrange this data in an orderly fashion.**

Bids Solicited	Savings
1	0
2	\$500
3	\$850
4	\$1,100
5	\$1,200
6	\$1,300

(4) **Now what are the variables?** They are: the number of bids, the amount of the savings, and the cost of processing. How do they work on each other? As the number of bids increases, so does the amount of money saved—and so does the cost of processing the bids.

(5) **What are your alternate courses of action?** In this case, they are the number of bids you can ask.

(6) **Now, formulate your mathematical sequence.** (you've already done part of this in Step 3); what you have to do now is add two more columns—one listing the cost per bid and the other giving the net savings, i.e., Column 3 subtracted from Column 2, like this:

Number of Bids Asked	Savings on Purchase Price	Cost of Processing to Firm	Net Saving
1	0	\$200	-\$200
2	\$500	\$400	\$100
3	\$850	\$600	\$250
4	\$1,100	\$800	\$300*
5	\$1,200	\$1,000	\$200
6	\$1,300	\$1,200	\$100

And there's your answer. You should solicit four bids because that's your point of greatest net savings, \$300 (\$1,100 savings on material less the \$800 cost of processing). If you solicit fewer or more bids, the cost of processing them will eat up more of the material savings and give you a smaller net.

That's Operations Research in action—a step-by-step analytical search for the crucial bits of information you need to make a decision and marshalling of that information in an orderly fashion so that you can come to the best possible decision.

Now try it on your own with these two slightly more complicated brain-teasers. The answers are on Page 36.

Homework

Problem 1.

Which Part to Order First

Frank Smith found himself with a reordering problem. He was running low on two items vital to his company's manufacturing operation, and because the engineering and purchasing paperwork were so detailed, he couldn't process both orders simultaneously.

Projections of demand showed that one of the items, No. 37 Thumbscrews, would be out of stock in four weeks; inventory on the second item, 40 Power Self-Actuating Cycle Eveners, would be exhausted in six weeks.

Order processing time, because of the details, were two weeks for the Thumbscrews and one week for the Eveners.

Adding to the urgency was the fact that delivery lead time on the first item was one week, and on the second item, four weeks.

The Question

So Frank's problem was this: Since both orders couldn't be processed simultaneously, which should he take care of first?

Problem 2.

Bid Solicitation Under Pressure

Stan Starr's firm, a concern that made baby carriages, got a hurry-up demand for one of its deluxe models, and Stan found himself in a dilemma. His inventory was low on two critical items needed to make the model.

To meet production schedules, Stan figured out he would have

to order the first item, Rubber Buggy Bumpers, within three weeks. The second item, Tiny Tooters, had to be ordered within two weeks.

The time required to complete an order involving a given number of bids was the same for each item. But like his NAPA friend, Frank Smith, in problem 1, Stan couldn't process bids and orders for both items simultaneously.

As in the Sputter Missile case, Stan knew that the more bids he got, up to a point, the better price he'd receive. But he also realized that the more bids, the longer it would take to process them.

So he got together all the information he could—including the estimated savings on multiple bids—and he drew up a table that looked like this:

No. of Bids	Processing Time	Savings on Bumpers	Savings on Tooters
1	1 Week	\$ 0	\$ 0
2	1½	300	700
3	2	450	900*
4	2½	500*	800
5	3	400	600

Now, if he had enough time, Stan would ask for three bids on Tooters and four bids on Bumpers because he could effect a total saving of \$1,400 (starred numbers added together). But it would take four-and-a-half weeks to process those bids, and he doesn't have that much time.

The Question

How many bids should he solicit for each item, and which item should he start processing first? *Answers on p. 36*

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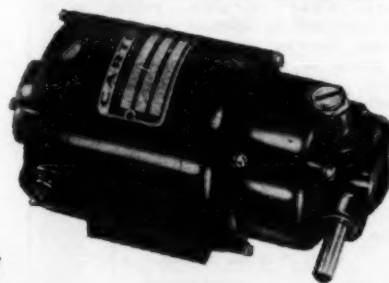
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Availability of Low-Cost Films Poses Make-or-Buy Decisions

New York—The development of low cost films may force a number of key make-or-buy decisions for purchasing agents who are trying to keep the lid on packaging costs.

The make-or-buy issue came to the foreground during a three-day American Management Assn. seminar on flexible packaging. The seminar took up the booming use of polyethylene, polypropylene, aluminum foil, coated cellophane, and PVA films in consumer products.

Discussion Topics

The main discussions centered around these topics:

- The cost-price squeeze on film converters.
- The adequacy of present equipment.
- Market standing of major films.
- Integration moves by raw material suppliers.
- Future markets.
- Future costs.

"The economics of packaging will strongly influence the packages in 1961," said Shy Rosen vice president, Milprint, Inc., in opening the meeting.

"Great stress will be placed on economy in packaging materials. These reductions in cost will be accomplished by means of new plastics, new combinations, new processes, more accurate determination of size, and more accurate determination of exactly what the product in the package will require from the packaging material by means of higher speed forming, filling, closing, and wrapping machines."

The Cost of Converting

Edward Tarnell, vice president of Roger Williams, Inc., management consultants, warned that lower raw material costs, as in the case of polyethylene, do not necessarily bring lower film and packaging prices because of the high costs of converting.

Tarnell nudged make-or-buy to the forefront of discussions by pointing out that obsolete equipment can act as a millstone to expansion in new films for both converters and "captive" operations. He noted that 75% of packaging equipment in use today was designed originally to handle cellophane, still the No. 1 packaging film.

No Upset in Standings Seen

He predicted there would be no upset in the market standing of the top three flexible packaging materials in the next five years, with olefins in the second spot and aluminum foil holding third place.

Tarnell said the "cost of market development in packaging is approaching depreciation costs." As a result, he stated, two trends may grow.

"First, more raw material suppliers may enter into converting and marketing of films in order to protect plant investment. Secondly, there may be more of a trend to think of packaging as a sales cost rather than a manufacturing cost. This may ease the pressure on purchasing," he said.

Tarnell urged packaging men

to keep an eye on suppliers' costs as guides for their own actions. He predicted that all of suppliers' costs from administration to utilities will go up 1% to 5% in the next five years.

This trend, together with growing competition, may force independent converters "to the wall," he said, and accelerate integration of packaging operations by raw material suppliers.

He cited price trends among films and foils since 1955 as an indication of future patterns, not-

ing that the price of 300 MS cellophane rose 6¢/lb. in five years, 1.5 mil polyethylene dropped 13¢/lb., and foil jumped 10¢/lb.

Tarnell observed that the three packaging products will "remain competitive" although volume will grow. He said he believed cellophane would remain largest volume despite lower polyethylene prices, and he predicted that there might be a good chance to reduce the 15¢ spread between resin and film prices in the next five years.

Among the product developments cited at the seminar were: the Alcoa can made from aluminum foil and paper board; boil-in pouches using PVA; liquid pack using foil; and polypropylene bread wrapper.

Polypropylene bread wrapping costs were tagged at 2.4¢ per 1,000 sq. in., compared to 2.9¢ for cellophane and 3.7¢ for waxed paper.

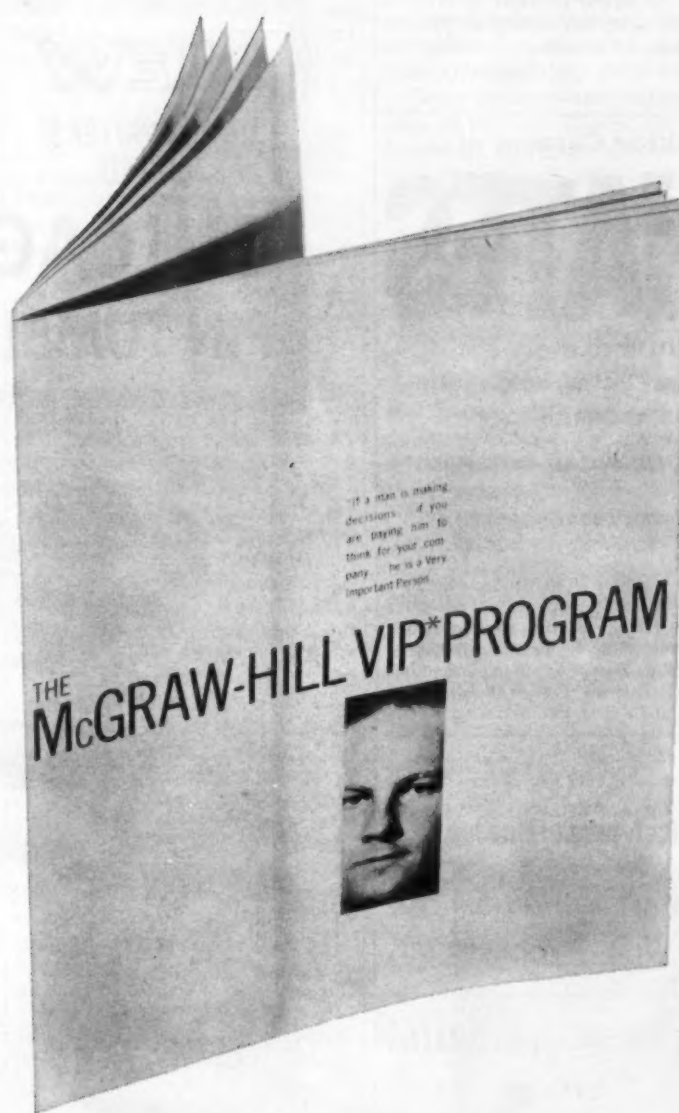
Costs for PVA water soluble film for the "boil pack" were given at 1¢ to 1.5¢ each, with

application work being pushed for low temperature applications.

Laminated film (PVC) for beer cases was credited with cutting almost 30% from costs. Costs dropped from 3.7¢ per trip to 1.9¢.

Portion pack for hair dyes was reported responsible for clearing up legal troubles developing from over use of dyes.

Summing up, speakers were unanimous in the belief that there is no upper limit to films and foils in its market.



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Answers to Strategy Problems on Page 34

Problem 1.

Frank got all of his data together and summarized it in a table that looked like this:

	Thumbscrews	Eveners
When Needed	4 weeks	6 weeks
Delivery Time	1 week	4 weeks

He subtracted the second line from the first to find out the deadline by which he must have his order-processing done. Then he took that information and the order processing time and made up another little table:

	Thumbscrews	Eveners
Deadline	3 weeks	2 weeks
Processing Time	2 weeks	1 week

From this he could see that if he spent two weeks processing the Thumbscrew order, the deadline for the Evener order would be at hand and he wouldn't have any time left to process it.

So, Frank took care of the Evener order first. That took a week, and he still had two weeks left in which to process the Thumbscrew order in time to meet that deadline.

Problem 2.

Stan took another look at his table (see page 34).

He saw that if he had to process the Bumper order within three weeks and the Tooter order within two, he would need two more tables, taking these deadlines into account. One table would have to take in the number of Bumper bids he could process in a given time if he ordered the Bumpers first, the time remaining to process Tooter bids, the number of Tooter bids he could process in the remaining time, and the savings he could chalk up. The other table would have to give the same information for Tooters.

This is what he came up with:

Number of Bumper Bids Solicited	Processing Time for Bumper Bids	Time Left to Process Tooter Bids	Number Tooter Bids That Can Be Processed	Total Savings on Both
1	1 week	1 week	1	0
2	1½	½	0
3	2	0	0

He saw immediately that asking for bids on Bumpers first wouldn't get him anywhere. The best he could do and still have time left to process Tooters would be to ask only one bid on Bumpers, and that wouldn't net him a single cent in savings.

So he made up a Tooter table:

Number of Tooter Bids Solicited	Processing Time for Tooter Bids	Time Left to Process Bumper Bids	Number Bumper Bids That Can Be Processed	Total Savings on Both
1	1 week	2 weeks	3	\$450
2	1½	1½	2	\$1,000*
3	2	1	1	\$900
4	2½	½	0

And there was his answer. The biggest total saving he could (Continued on page 37)

Water Carrier Industry Clears Decks for Fight Against Waterway Tolls

Washington, D. C.—The water carrier industry is mapping a new campaign to fight the growing threat of proposed tolls on inland waterways.

At a recent meeting in St. Louis, members of the National Waterways Conference announced the opening of offices here to spearhead the battle against tolls.

Braxton B. Carr was named chairman of the organization committee of the conference. Carr is over-all conference chairman and president of the American Waterways Operations, Inc.

Formation of the group was triggered by these critical developments:

- Proposal by the Commerce Dept. for a user tax on inland waterways in its report, "Federal Transportation Policy and Program," published last March (see PW, March 21, April 25, '60).

- Introduction of bills in the last Congress which would levy a toll of about two mills per ton mile.

- Proposal before the Doyle Transportation Study Group of the Senate Interstate and Foreign Commerce Committee which would also levy about two mills.

The conference sees a four-point danger in waterway tolls:

- (1) An inflation spiral in all transportation costs, because rates of other modes are keyed to basic water carrier rates.

- (2) Dislocation of industries which have keyed their construction and expansion programs to water-located sites.

- (3) Discrimination in transportation and marketing.

- (4) Destruction of a "substantial portion" of the nation's water transportation resources and services.

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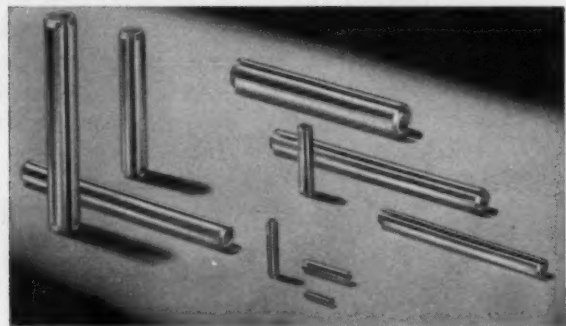
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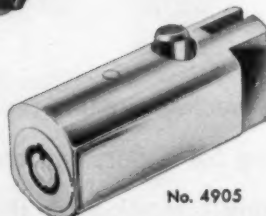
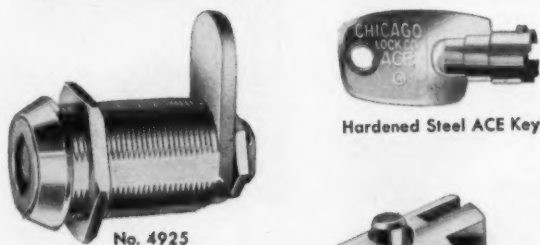
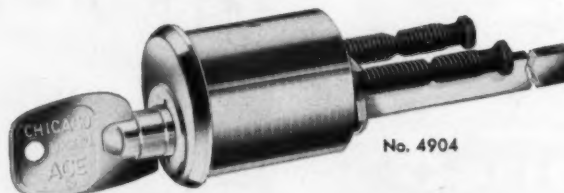
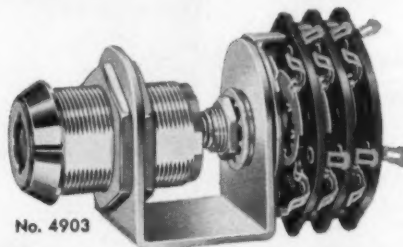
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Shippers Stand to Benefit From Rail Mergers

(Continued from page 1)
portation techniques through increased automation and addition of modern transportation equipment.

Signs of the big payoff are beginning to be felt by customers of railroads that have already taken the merger route. And the dividends should continue to pile up for shippers all around the country now that the Interstate Commerce Commission has begun to turn a sympathetic ear to the idea of rail mergers. A total of 22 railroads are currently involved in merger talks.

The most recent merger—that of the Erie and the Delaware, Lackawanna & Western Railroads—underscores some of the advantages the rails hope to gain by consolidation: The merger was engineered by the firm of Wyer, Dick & Co., which is also handling a number of other giant rail unions now under study.

"The biggest advantage to shippers from the Erie merger," consulting Engineer William Wyer told PURCHASING WEEK, "is the elimination of duplicate facilities."

Wyer pointed out that the merger, effective Oct. 17, will have these specific effects:

• **Routing Changes.** Duplicate lines from Buffalo to points connecting with New England will be abandoned. Only the shorter Erie run to Maybrook, N. Y., will be maintained.

• **Rescheduling.** Duplicate trains will be rescheduled to permit more frequent runs on the same route.

• **Plant Consolidation.** Duplicate freight yards in Binghamton and Elmira, N. Y., will be abandoned, while a new electronic yard will be constructed in Buffalo, where the two lines' yards will be consolidated.

• **Rate Reduction.** "Two-road" rates for such selected commodities as gravel and ce-

ment will be reduced to "one-road" rates.

• **More Personalized Service.** Some 30 to 40 Erie sales offices and 27 Lackawanna offices will be expanded to about 100.

"What all this adds up to," Wyer continued, "is better service for the shipper. Consolidation of yards will mean elimination of interchange delays, switching charges, improvement of connections with other rail lines, and more direct routing."

The Erie-Lackawanna union, third since the current trend began in 1959 under the impact of the previous year's recession, could soon be overshadowed, however, if the ICC approves these four other major mergers now pending:

• **Chesapeake & Ohio; Baltimore & Ohio; & New York Central.** This union, still in a state of flux, would create the nation's largest road in terms of track, with some 21,600 miles. This would mean among other things, the elimination of one or more of the three lines' port terminal facilities at New York, Baltimore, and Norfolk. Entry of Labrador ore would be directed to a single East Coast port—at lower rates, of course. In addition, 1,200 miles of duplicate track would be abandoned, including one B & O route from Wheeling, W. Va. to Philadelphia. A B&O yard in Huntington will be abandoned in favor of the C & O facility there. Some 20% of B & O's rolling stock, now tied up because lack of funds have prevented repair, would go back into service (coal producers say they'll save \$1/ton when the C & O takes over maintenance of the B&O).

• **Seaboard Air line and Atlantic Coast line.** This merger, which would save the two lines an estimated \$38.7-million/year, has already been put before the ICC, but no hearing dates have been set.

The union would result in a combined 60,000-car supply available to shippers. Two-road rates, now in effect on sand, gravel, stone, lime rock, and pulpwood, will be dropped to one-road rates. The railroads' two way trains between Savannah, Charleston, and the Richmond Potomac yards will be replaced by two solid trains/day and by one way train. Similar services will go into effect between Tampa, Fla., and Richmond. The companies' two yards in Jacksonville, Fla., will be consolidated into a new \$20-

million facility. All other duplicate yards and track will be eliminated.

• **Chicago, Burlington & Quincy; Great Northern; Northern Pacific; and Spokane, Portland & Seattle.** This end-to-end merger will probably eliminate all interchanges on a stretch from Chicago to points in the Northwest. Consolidation of Twin Cities facilities will expedite freight through Minneapolis and St. Paul in 12 hours—as opposed to 15 to 18 hours now required.

• **Minneapolis, St. Paul & Sault Ste. Marie (Soo Line) and Duluth, South Shore & Atlantic.** Estimated savings from this merger have been set at \$1.26-million annually. Chief routing change will be on run between Soo Junction and Sault Ste. Marie, which would be replaced by the more direct Trout Lake, Mich., to Sault Ste. Marie route. Some switching charges at interchanges between the two roads would be eliminated.

In all, some 22 lines are currently involved in merger talks, including the Norfolk & Western, which only last year merged with the Virginian, in what was then known as the "biggest rail merger of the century." The N & W is now interested in a Union with the Nickel Plate Road.

In addition to the N & W-Virginian and the Erie-Lackawanna tie ups, two other roads, the Central Pacific and the Southern Pacific have also merged. Other lines that would like to get together include: Chicago, Rock Island & Pacific with the Chicago, Milwaukee, St. Paul & Pacific; Chicago & Northwestern Railway with the Minneapolis & St. Louis Railway; and the Missouri Pacific Railroad and Chicago & Eastern Illinois Railroad.

"What this merger trend means," William Wyer explained, "is that the era of inter-railroad competition has ended. The roads no longer have a monopoly on transportation and their problem is to meet the competition of other forms of transportation."

One of the big advantages the railroads hope to gain through merger is reduction of feather-bedding personnel, a thing they've been unable to do through contract negotiations.

Many railroad executives put estimates of work force reductions through merger as high as 25%. "We'll have to pay a big price, however," commented one industry executive, "because we'll have to pay them up to four years of separation pay."

This Week's

Purchasing Perspective

OCT. 3-9

(Continued from page 1)

washing machines, refrigerators, TV sets, and new and used autos continue at about the same pace as one year ago—although buying intentions were down slightly from earlier this year (January and April).

The FRB survey (conducted by the Census Bureau) still is considered experimental by board officials; but they are pleased enough with it to order an expansion to cover phonograph and radio equipment, air conditioners, clothes dryers, and dishwashers. Data on those findings won't be available, however, until next year.

The Federal Reserve Board survey covers a much larger sample than that of the Michigan Survey center—some 20,000 households, compared to 1,600. On the strength of that factor, government officials feel their findings may be more reliable.

• **UNEASY INDICATOR—The August figures on inventories will be examined closely for further clues to the vigor of business in general and the extent of recession phobia in particular.**

Commerce Department statistics published just a month ago indicated a net liquidation of factory stocks—although on only a moderate scale—after months of trying by industrial buyers to reduce inventory levels or at least hold them in check.

Some business analysts hold that should liquidation of stocks ease in the new figures, the general business outlook would be improved. Further liquidation, on the other hand, would mean business news of unfavorable implication.

But other industrial observers argue differently as regards inventories as indicators of business ahead. They contend that, on the record, inventories start declining only after the initial stages of recession and into the early months of recovery. Thus, they consider several months of total inventory declines as a sign of recession recovery—i.e. the worst is behind.

• **HELP WANTED—U. S. talent can help win and hold the new nations of Africa and Asia to the side of the West.** The ability of purchasing experts can contribute in no small way to the success of the U. S. in defeating communist power grabs in those countries.

The neophyte governments of these new nations are anxious to get started on developmental programs. They need procurement and supply management experts, and this country's International Cooperation Administration is trying to supply them.

The ICA, which sends supply missions to some 60 nations, is seeking to round up more procurement experts to help underdeveloped nations, in South Asia, the Far East, and Africa organize their own "GSA's." Some of the available jobs are permanent (2-year plus contracts) while others require consulting services on a 60-to-90 day or 1 year basis. For instance, PURCHASING WEEK's consulting editor, F. Albert Hayes, will depart this month for a month-long mission in Israel where he will conduct purchasing administration and supply management sessions for Israel officials.

Qualifications: Basic knowledge of general procurement, bidding practices, some international banking, warehousing and inventory control, port operations, and ocean transportation. Pay \$8,000-to-\$12,000/year. Some jobs may draw more.

Refiners Use Additives to Help Sales

(Continued from page 1)

field and pressures from Detroit narrow the choice to a few select, built-in additives that will increase octane number and antiknock ability without any substantial increase in price.

Although the petrol producers are mum right now, certain actions have spoken louder than words:

• The kissing cousin to tetraethyl lead—tetramethyl lead (for higher octane and antiknock qualities)—is being pushed on the West Coast.

• The aromatic base necessary for methyl (TML) is becoming more popular among gas producers.

• Du Pont has released its "Tetramix" (TMEL)—a cross between ethyl and methyl—and has already shipped an order to the West Coast.

• Du Pont also has announced

price reductions for both (especially suitable for compact cars) methyl and Tetramix additives.

• Auto makers, and spark plug manufacturers, are demanding better ignition performance at lower octanes, so phosphorous additives are once more in the lime light.

• Built in anti-ice additives are becoming increasingly popular.

• Shell's additive endeavors extend to the crank case. They claim to have the only non-ash oil.

Industry sources say that with approximately 1,000 different blends of gasoline, and almost 200 refiners it will be quite a while before the new additives are proven out and made suitable for all users. But the ones worth watching now are: anti-knock, ignition control, and anti-freeze.

Price Changes for Purchasing Agents

Item & Company	Amount of Change	New Price	Reason
INCREASES			
Anhydrous sodium sulfate, Eastern supplier, bulk, ton..	\$2.00	\$34.00	incr. costs
Octylphenol, Rohm & Haas, bulk, lb.....	.005	.215	incr. costs
Dodecylphenol & nonylphenol, Rohm & Haas, bulk, lb..	.005	.20	incr. costs
Vat colors, red 2-B powder, 2-BD, lb.....	.14	\$1.45	good demand
REDUCTIONS			
Tung oil, imptd., lb.....	.00125	.2275	
Copper water tubing and pipe, various sizes, brass mills	5% average	import competition
Tetrabromobisphenol-A, Michigan chem., lb.....	.25	.65	prod. econs.
Gum turps., So., gal.....	.0015	.451	

'Outmoded' Cargo Rates Hit by Former ICC Chief

(Continued from page 1)

Arpaia said, "that shippers will not continue to tolerate the trapings and formalities of the past in the carrier tariff and rate structure." His solution was based on the current "trend away from the weight unit to a space unit of determining freight charges."

In support of his cube-mile argument, he asked, "What does a carrier have to sell? Two things: space in a vehicle and the distance the vehicle is carried. Nothing more. Once the cubic capacity of a vehicle or ship has been used up (subject to maximum weight limitations of the vehicle or law) the carrier can add no more for that trip, regardless of weight."

Possible Headache

The cube-mile rate might mean that the shipper would find himself looking for more economical and efficient methods of shipment packaging, Arpaia pointed out. Offsetting this possible headache, however, are these areas in which the cube-mile concept would ease the shipper's problems:

- **Simplified rate regulations.** "Tariffs are baffling, confusing, and complicated," he said. "A mistake can cause serious consequences since the law places upon the shipper a definite responsibility for tariff knowledge. The monster they have to deal with today frightens them."

- **Fewer staff expenses.** "In addition to the direct costs of for-hire transportation a shipper must contend with the expense of a staff of experts, clerks, office space, commercial counsel, etc."

The cube-mile rate, Arpaia asserted, would provide "fairer results to shippers and a truer relationship to carrier costs." At the root of the problems of shipper and carrier alike, he feels, is the present lack of inter-carrier coordination and integration.

"Our present economy, an increasingly more decentralized industry, and the growth of world commerce each are helping to create a larger and larger sphere of traffic which cannot be handled by a single mode of transport. Under such circumstances, a transportation service adapted to a shipper's full requirements from beginning to end, without the turmoil and labor of making subordinate arrangements for each leg of the haul, is becoming more and more pressing."

Containerization Basic

Arpaia saw containerization as basic to an integrated transportation system. He scored carriers for holding back the growth of container traffic, characterizing it as "proverbially cautious, timid and suspicious." Even though cumulative piggyback loadings for the first 33 weeks of 1960 were 35.5% ahead of the same period in 1959 and 115.1% greater than 1958, he pointed out that:

- Out of 112 Class I railroads in the U.S., only 55 handle piggyback traffic. "And the number of these which coordinate with each other is limited," he said.

- Of the 55, less than half coordinate with independent truckers under Plan I.

- The number of ocean carriers and water carriers who have taken the first step and containerize at all is even less impressive.

Among the manufacturer exhibits at the exposition were cargo handling devices representing the latest offerings toward piggyback efficiency:

- Fruehauf and Strick showed 40-ft. tandem axle trailers which can be split into 20-ft. units for more efficient interchange.

- Moore-Handley's Morhaul Division unveiled a self-contained removable leg unit for use in standard fork lift pockets. This is the latest addition to its trailer system.

- Seatrain demonstrated three new design characteristics on its "Travelift" unit for handling large

containers: a "load binder" locking container to chassis, a "self-stowing" device, and a jointed lifting frame.

- Westinghouse and General Electric exhibited new winch drives, both primarily emphasizing improved circuitry and reduced weight and space characteristics.

The Cargo Handling Exposition and Symposium was sponsored by the Port of New York Chapter of the U.S. Merchant Marine Academy Alumni Assn. and the U.S. National Committee of the International Cargo Handling Coordination Assn.

Pacific Maritime Association Sets Automation Fund Talks With Seamen

San Francisco—Labor's price tag on maritime automation is threatening to get larger, and upcoming negotiations here will

offer strong evidence of what the cost may be on a nationwide scale.

General Motors Begins Inquiry Into Employees' Outside Business Deals

(Continued from page 1) staff executives and all employees with any responsibility in procurement of goods and services have received questionnaires, which they were told to keep in strict confidence.

A GM spokesman described the investigation as a means of "assuring itself" that no conflicts of interest in concerns doing business with the company exist among employees involved in purchasing. The move was described as intended to "re-affirm the corporation's long standing position" prohibiting employees from holding conflicting outside interests.

A crucial holding, it would appear, amounts to \$10,000 or more, in GM's view. Here is how disposition would be made of a case where such holdings are involved:

- An employee with direct responsibility for or influence over purchasing of parts or services will be asked to divest himself of his holdings if they are in excess of \$10,000.

- An employee with more than \$10,000 holdings in a supplier but not in a position of influence or responsibility with regard to purchases may or may not be asked to divest himself of his interests, the matter being at the discretion of the executive committee.

In general, industry opinion is that in the light of past safeguards it would be unlikely that a situation paralleling the Chrysler-Newberg affairs could develop at GM.

One of these safeguards is said to be Du Pont's "watchdog" financial interest in GM. The company has had a policy in effect since 1921 forbidding employees to hold conflicting interests in GM suppliers. While such cases have developed, the company said, they have been only "minor and isolated instances."

The questionnaire currently circulating among employees apparently was not prompted by developments uncovered within the company.

Open for Review

Basic seamen's contract expires Sept. 38, 1961. However, the contract is now open for wage review and labor representatives, in preliminary meetings with PMA, have asked for inclusion of the topic in the upcoming negotiations.

In 1959 PMA negotiated a precedent-making contract with International Longshoremen and Warehousemen Union, which established an "automation fund" of \$1.5-million to offset the effects of unemployment on the docks brought about by use of labor-saving machinery.

Fund Increased

This year the fund was increased to \$4.5-million, all contributed by the shipowners. The formula for its disbursement is still being worked out by committee.

A key point in the setting up of the system was that the Longshoremen Union would not oppose mechanized work practices on the docks, and would allow its membership to drop over an extended period in keeping with dwindling demand for dockside workers. (PW, June 6, '60, p. 24).

Want Similar Fund

Now the unlicensed seamen want a similar fund. To bolster their case, they point to Matson's Hawaiian Citizen, a fully-containerized vessel which requires fewer crewmen than a conventional ship with the same capacity.

Sailors Union of the Pacific tied up the ship for a week at Portland last spring, finally agreeing under protest to sail with a reduced crew. At that time SUP threatened to bring the Hawaiian Citizen problem to the negotiating table this fall. The decision to ask for an automation fund was undoubtedly influenced by that incident.

J. Paul St. Sure, Chief Bargaining Agent of PMA, told PURCHASING WEEK, "we have taken the position that wherever labor-saving devices are used this is a fit topic for discussion."

Late News in Brief

Steel Scrap Prices Sag

Chicago—Steel scrap prices dipped another dollar here last week, setting off predictions that the market "may come apart at the seams."

The wave of pessimism followed a \$1 drop in No. 1 heavy melting which hit \$28/ton, lowest price in over six years. No. 2 bundles also lost \$1 to \$17/ton.

New Orders for Machine Tools Are Up

Cleveland—The National Machine Tool Builders Assn. reported new orders for metal-cutting tools climbed to \$49.45-million in August, a \$15.95-million increase over July and \$7.2-million above August, 1959. The rise bucked a year-long trend of constantly dropping orders.

Ike Moves to Halt Strike

Washington—President Eisenhower last week invoked the Railway Labor Act to prevent a threatened strike against railroads that ferry freight cars across New York harbor.

Under the Railway Labor Act, the President has the power to prevent for 60 days any interruption of the freight-car ferrying service. The strike had been scheduled to begin at 12:01 a. m. last Saturday.

Cuts Tags on Station Arresters

Pittsfield, Mass.—General Electric Co. has dropped its prices on station arresters by 1.2% and intermediate arresters by 2%, effective on all ratings for both items.

At the same time, Westinghouse Electric Corp. announced it was reducing published prices of station cubicle switchgear by 15% and isolated phase bus by 20%. The Westinghouse cuts are retroactive to Aug. 23.

Tiny Postage Meter Is Unveiled

New York—Tele-Norm Corp. has unveiled a new postage meter that it says is the first to print directly on any size envelope or package, thus eliminating the need for a mailing machine.

The new device, trade-named "Postalia," weighs only 5 lb.—half the weight of the lightest meter on the market, according to Tele-Norm—and can be hand-operated as a portable for small mailings. It has already been approved and licensed by the U. S. Post Office Dept.

Fred Marcus, Tele-Norm president, said that lease rates have been drastically cut to an all-inclusive flat charge of \$8.50 monthly, compared to rates for most competitive models, which are based on size of the meter and the amount of the postage used.

This low, flat rate, according to Marcus, opens up a broad untapped market among small business firms and self-employed professionals, which have found conventional meters too costly for their small mailing needs.

The meter also has been designed with the needs of the large-volume user in mind, Marcus said. An easy snap-in adjustment allows its use with either a manual or electric drive letter sealer, with a capacity of 6,000 letters/hr. The meter can stamp up to \$9.99 in a single imprint compared to \$1.09 for most competitive models. Postage prepayment up to \$9.99 is standard on Postalia compared to only \$99 on the smallest competitive models, the company said.

Unlike present meters, no tape is needed to apply postage to irregular-sized items, such as cartons, parcels, tubes, and manila envelopes, since Postalia will stamp directly on any package over which it is rolled.

To make bookkeeping easy, ascending and descending counters are provided on the face of the meter. The former shows the amount of postage used, the latter the amount of unused postage remaining in the meter. An auto-

matic locking device stops the meter from printing when unused postage drops below \$10.

Other features include: a safety release button to prevent double stamping; a safety lever to prevent error when setting postage amounts; and a safety lock to guard against misuse.

General Electric Gears For Business as Usual Despite Strike Threats

(Continued from page 1) wage increase tied to productivity and the cost of living.

The company offered a three-year contract, including an immediate 3% wage increase, a 4% increase in April, 1962, an other benefits.

GE also offered a job retraining program aimed at providing more job security. The union rejected the plan and demanded higher unemployment benefits in the event of layoffs.

Contracts between GE and the IUF normally set the pattern for GE's agreements with other unions and for the entire electrical equipment industry.

The IUE represents workers in only one of every three GE plants, but Philip D. Moore, GE's chief negotiator, said the company would be hit "quite severely" by a walkout in the long run.

However, a memo to the GE management last week said a strike would have only a "limited" initial effect.

"A great many of our domestic plants will be virtually unaffected for many months by any strike at other locations," the memo said.

"Then too, our new orientation as an international producer and seller of goods puts us in a better position to make any indicated temporary adjustments to help us serve our customers, along with our other efforts to insure that there is no serious interruption of the flow of goods and services to our customers."

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James D. Short, Supervisor of Tabulating, American President Lines

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THE SETTING: American President Lines operates 30 cargoliners and 5 passenger liners. To make up voyage revenue and budget reports, the company collects and sifts mountains of data from scattered ports all over the world.

Reservations from 18 offices, 30 principal agents and thousands of travel agencies funnel into San Francisco headquarters every 24 hours. Facts in foreign weights, measures and currencies are converted to U. S. equivalents, summarized, and printed. The system also produces many other important reports.

THE SYSTEM: Data received is put on punched cards. An electronic accounting machine processes the cards, converting to U. S. standards, and prints the information on a daily summary sheet, an interim revenue report. This is revised daily as new figures come in and, in its final stage, is the final accounting.

After a ship has sailed, more incoming data is carded and radioed to sea. After a 120-day cruise, a budget report is run off, summarizing the vessel's performance—estimated vs. actual. A final budget report compiled in 10 days, as against 8 man-months, is the basis of management decisions on cargo matters, revenue volume, receipts and expenses, equipment needs, etc. The system speed-up resulted largely from eliminating 300,000 tedious manual postings a year—a crucial operating gain. The Moore forms in the system are the Line's control in print.

THE COUNSELORS: "We appreciate the system control and the help in forms design which the Moore man gave us," says James D. Short, Supervisor of Tabulating. For more details on how Moore may be able to help with *your* problems—no matter what kind or size of business—write the nearest Moore office. No obligation, of course.



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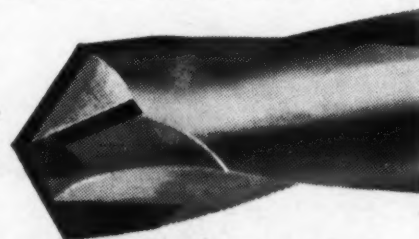
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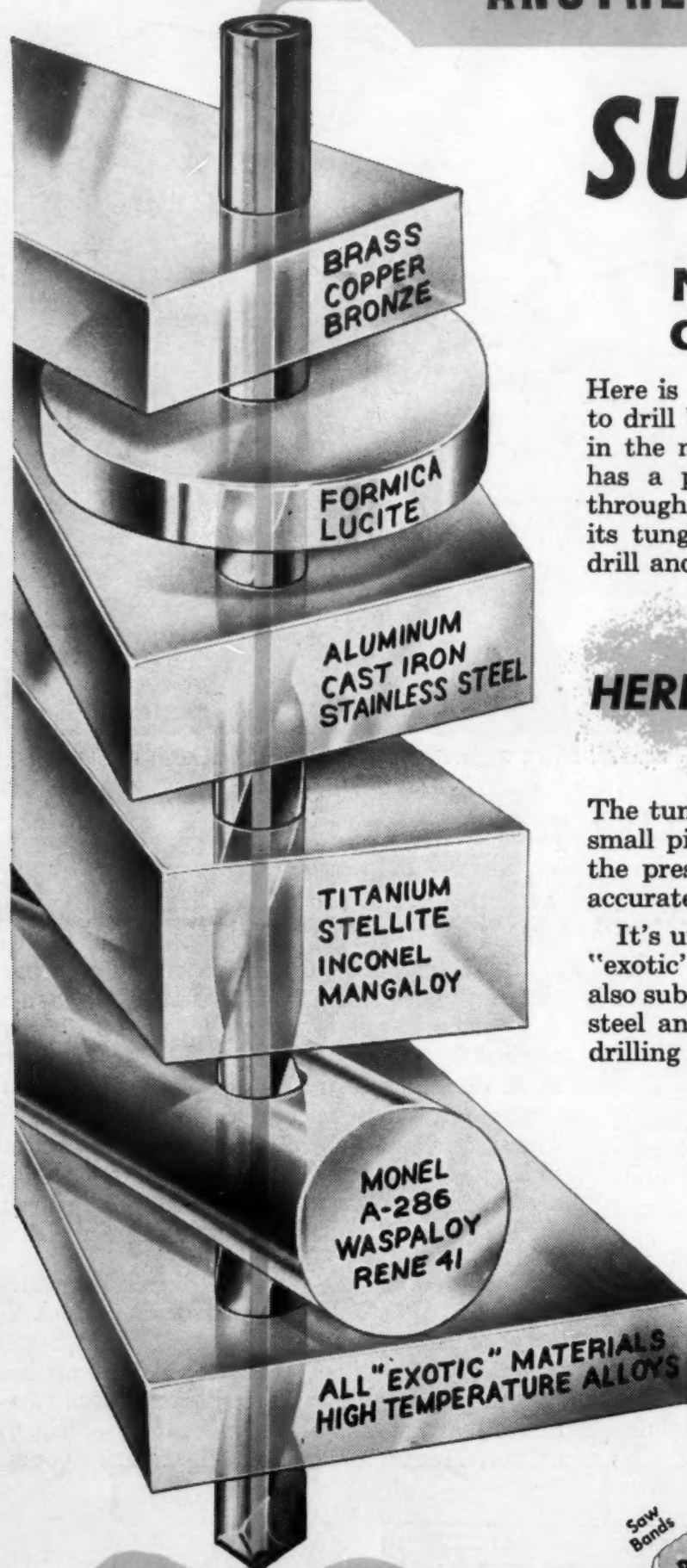
The tungsten carbide tip has a negative rake to break chips into small pieces. These are quickly flushed up through the flutes by the pressurized coolant. Results: faster drilling; no withdrawal; accurate, superfine finished holes that often eliminate reaming.

It's unequaled in hard, tough, abrasive materials, including the "exotic" high-temperature alloys. The *COLD-POINT* Drill will also substantially increase production on aluminum, brass, stainless steel and many other materials which do not present as great a drilling problem as high-temperature alloys.

AVAILABLE IN 3 LENGTHS

COLD-POINT Drills are available through your nearby DoALL Sales-Service Store. Over 200 standard sizes, $\frac{1}{8}$ "- $\frac{3}{4}$ ", and letter sizes A-Z, in Jobbers, Stub and Taper Lengths. Special lengths, diameters and internal threaded shanks can be furnished promptly. Also available: h.s.s. and DoALLoy† (cast alloy) tips. Prices on application.

Start cutting your drilling costs with DoALL *COLD-POINT* Drills. We invite you to try these sensational drills on your own work. Call your local DoALL Store today.



With COLD-POINT Drills

you get increased productivity at lower cost on your...

Screw Machines
Chucking Machines
Drilling Machines
Turret Lathes

COLD-POINT Drills can be used on any machine with hollow spindle. Any other machine can be easily adapted with a coolant-fed chuck.

*Reg. T.M.—Mossberg
U.S. Patent No. 2,871,983

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†Reg. T.M.—The DoALL Company



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